

Granular Applicator Hose Routing

Hose Routing

Air System Installation to the Cultivator

Mount the Primary run quick coupler to the rear bar near the centre line of the cultivator. Mount the granular Divider Heads to the cultivator frame. Lay outs for specific machines are shown in the "Deflector and Secondary Head Locations" Section.

If the machine being set up is not one of the models shown on page 9-18 and 9-45 then use and illustration that closely resembles the unit and follow the general guidelines for hose routing.

1. Measure and cut the 2 1/2" diameter primary hose to the required lengths between the Quick Coupler and the Divider Heads. The OUTER HEADS should have the hose installed first, then the INNER HEAD. Finally measure and cut the primary hose to the required length between the Air Seeder and the Quick Coupler.

Run the Hoses between the Air Seeder and cultivator with sufficient sag to allow for sharp turns without the hoses stretching and pulling off the steel primary tubes. See photo below.

2. **IMPORTANT: Make sure Divider Head outlets match with Metering Wheel size ie. 7 outlet head to 7 run metering wheel, etc.**
3. Run hoses with a minimum amount of sag. Hoses should be straight as possible but not too tight. If there is more than one Divider Head on one side of the cultivator, tie primary hoses together with tie straps.

On long runs of primary hose it may be necessary to add additional supports to prevent excess sagging of the hose.

There are some basic rules that should be followed. These are listed below:

- Always cut the 2 1/2" diameter primary hose for the long runs first.
- Ensure that the 2 1/2" diameter primary hose from the divider runs as level as possible.
- Ensure that the secondary hoses 1" diameter do not run higher than 3" above the height of the divider head.
- Always ensure a 12" straight section of hose enters the deflector.
- Avoid sharp bends in any of the hoses.
- Check for pinch points and clearances when folding in and out of transport.
- If long runs of primary hose are required, it may be necessary to add additional supports to prevent excessive sagging. (Use the same support that is used to support the flat fan divider)
- Quick coupler blank off plates are provided to blank off the entrance to the hoses when the Air Seeder is disconnected from the cultivator. These blank off plates should be stored in a place that is readily accessible.

Important: Check for hose interference with the Wing-Lift mechanism when unit is folded into transport. Hoses should not have any KINKS.

IMPORTANT

Hot water is the only acceptable lubricant for the installation of the 2 1/2" Black Coupler Hose.

WD-40 or any other lubricant (i.e. liquid detergent) will have a negative effect on the chemical stability of the hose, resulting in the degradation and failure of the hose due to Environmental Stress Cracking.

Hose Routing

Deflector Installation

Deflector spacing and height are very important.

These dimensions determine the accuracy of chemical spread pattern. The deflector spacing is given in the following pages for each model and size of cultivator that MORRIS currently markets.

All the cultivator shovels must sit on a level surface. The height of the deflectors must be set at the deflector spacing (s) plus the working depth (d). This distance, "D" = d + s is measured from the ground surface to the deflector plate.

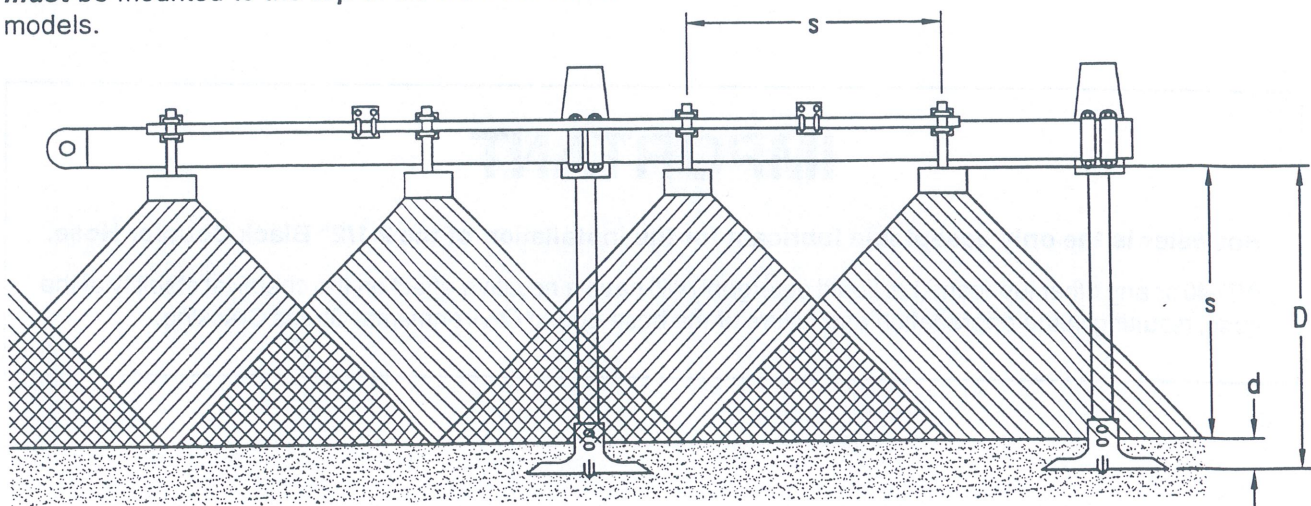
The deflectors must also be set square to the frame. If the deflectors are not set properly this will result in a poor product Spread-Uniformity.

To ensure the deflector is mounted correctly:

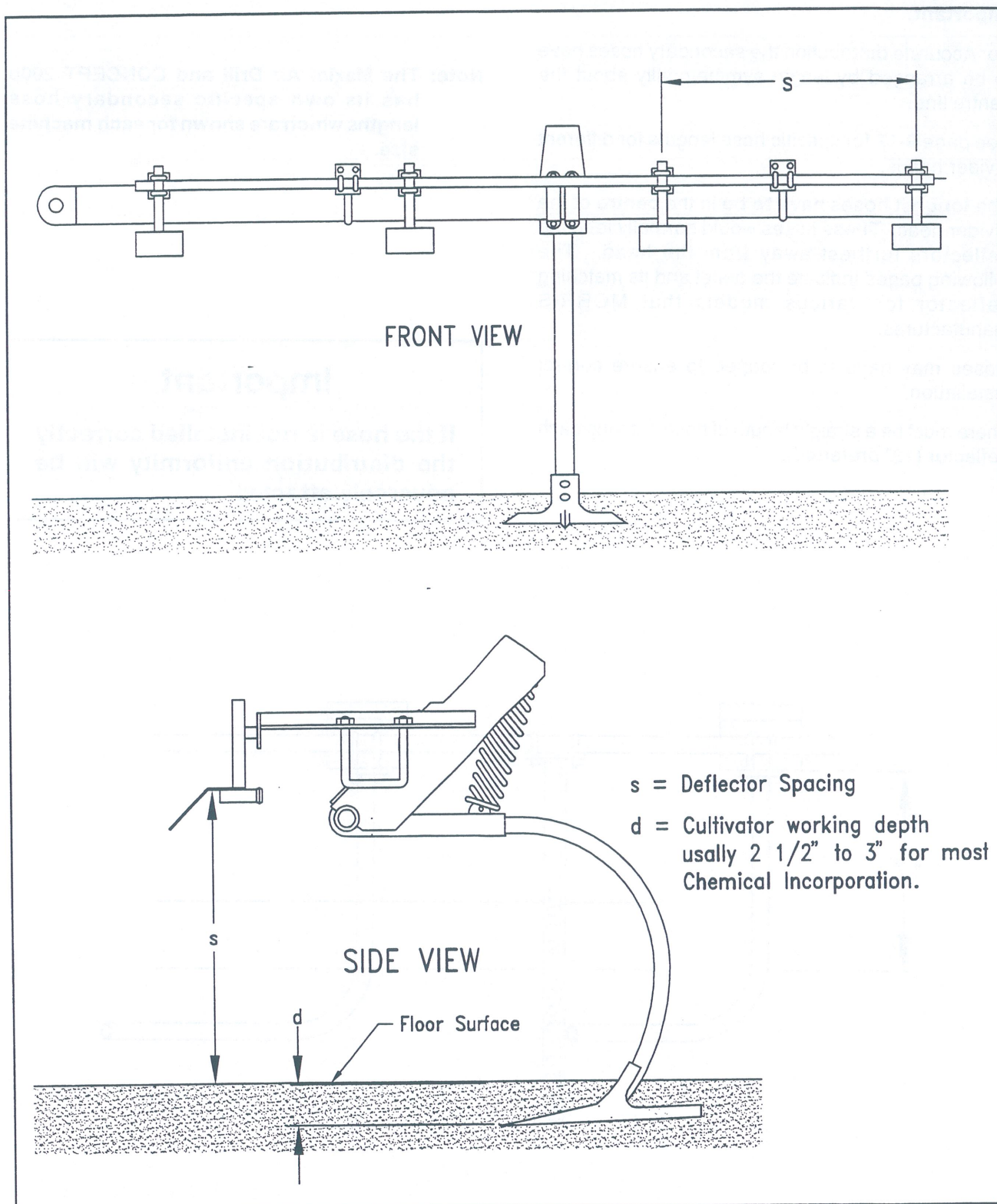
1. Determine the height of the deflector from the 3/4" mounting bar.
2. Cut 2 pieces of wood the identical size that matches the distance in step 1.
3. Place the two blocks of wood on the top of the deflector.
4. Push the deflector up so the blocks of wood contact the mounting bar.
5. Tighten the U-bolts holding the deflector to the mounting bar.

Use the following diagrams on page 9-18 to 9-45 as a guide to mount the deflectors for particular cultivator models.

Install the deflector mounting bracket to the front bar of the cultivator. the deflector mounting bracket **must** be mounted to the **top** of the front bar for all models.



Deflector Installation - Continued



Hose Routing

Secondary Hose Installation

The lengths of the 15/16" diameter hoses are **very important**.

For Accurate distribution the secondary hoses have to be arranged by length symmetrically about the centre line.

See page 9-17 for specific hose lengths for different divider heads.

The **longest** hoses **have to be** in the **centre** of the divider head. These hoses would normally feed the deflectors furthest away from the head. The following pages indicate the outlet and its matching deflector for various models that MORRIS manufactures.

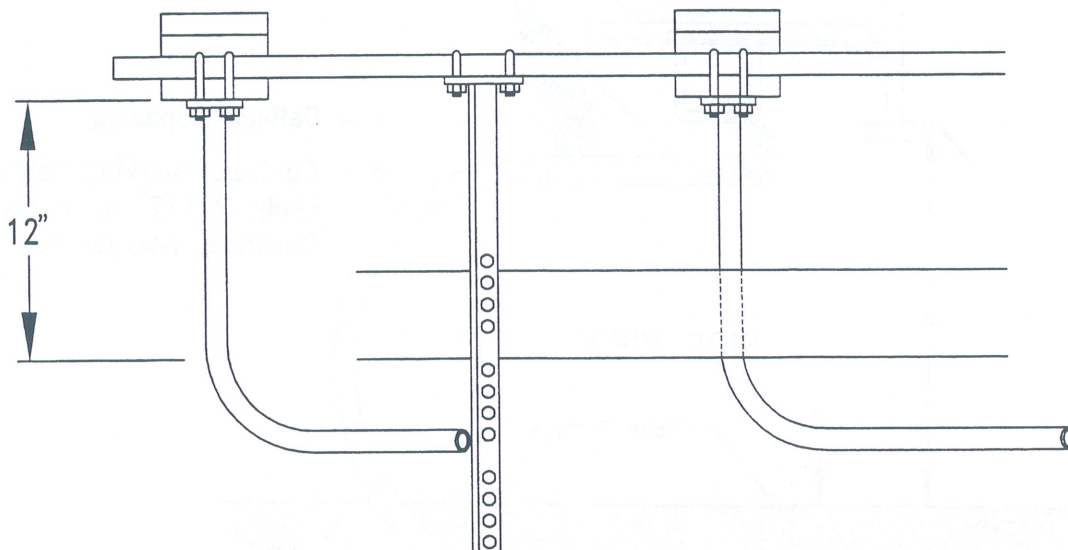
Hoses may have to be looped to ensure correct installation.

There must be a straight length of hose entering each deflector (12" preferred).

Note: The Maxim Air Drill and CONCEPT 2000 has its own specific secondary hose lengths which are shown for each machine size.

Important

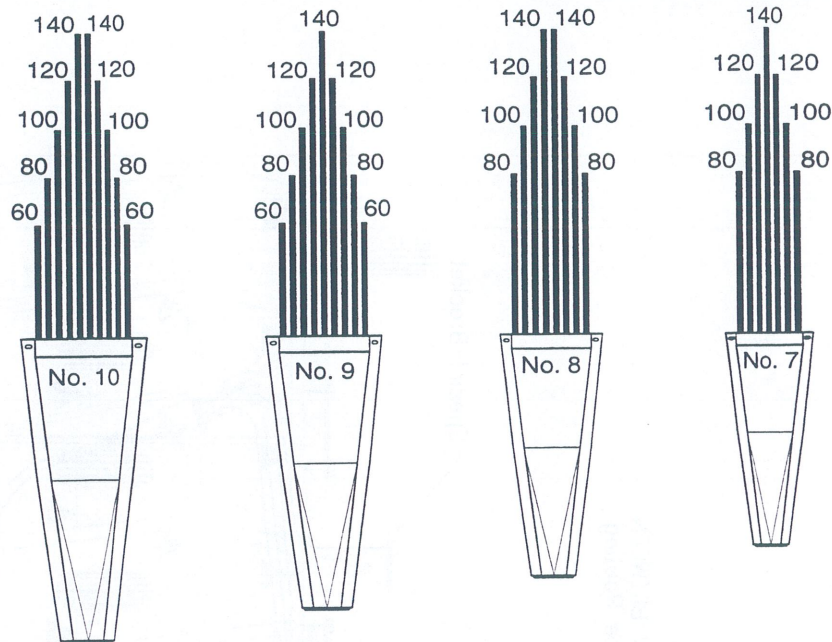
If the hose is not installed correctly the distribution uniformity will be adversely affected.



Hose Routing

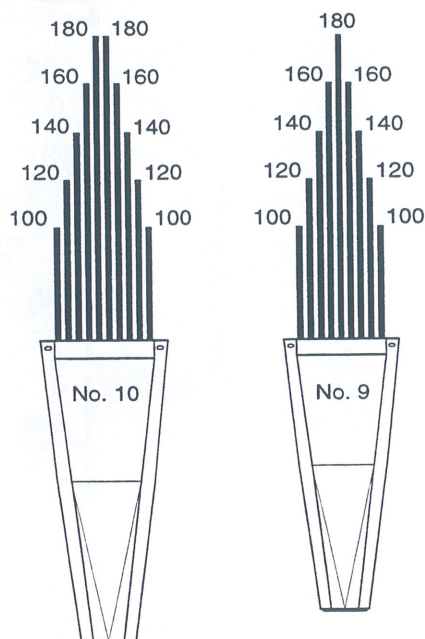
Hose Lengths - Magnum II, 8900, 9000 and Challenger II

Except Wing Frames of 55'-59' 8900 & 9000 Floating Hitch Cultivators.



Secondary Hose lengths for 8900/9000 5 Frame Machines

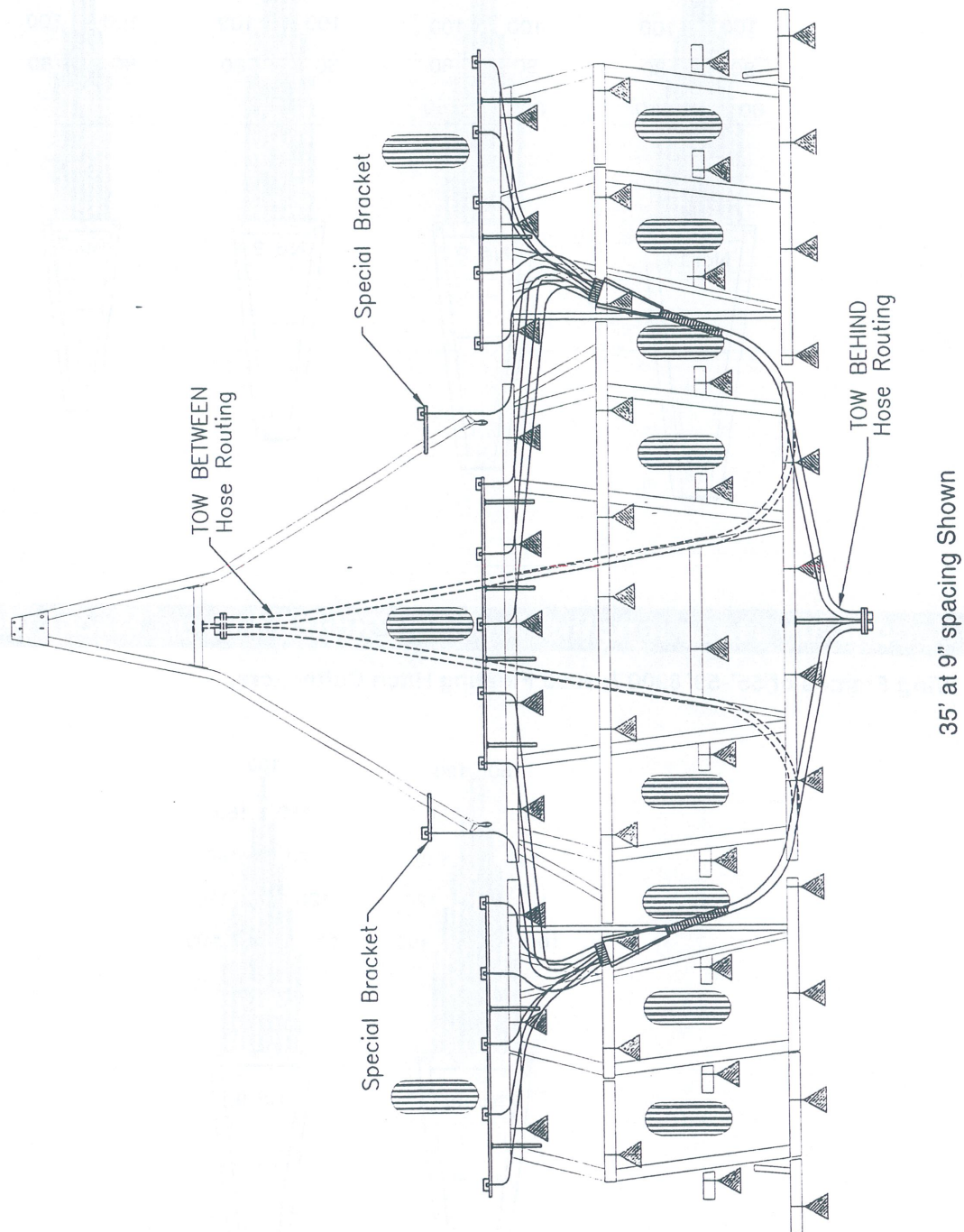
Wing Frames of 55'-59' 8900 & 9000 Floating Hitch Cultivators.



Hose Routing

Deflector and Secondary Head Locations

Cultivator Model 8900 & 9000 25'-35'



Hose Routing

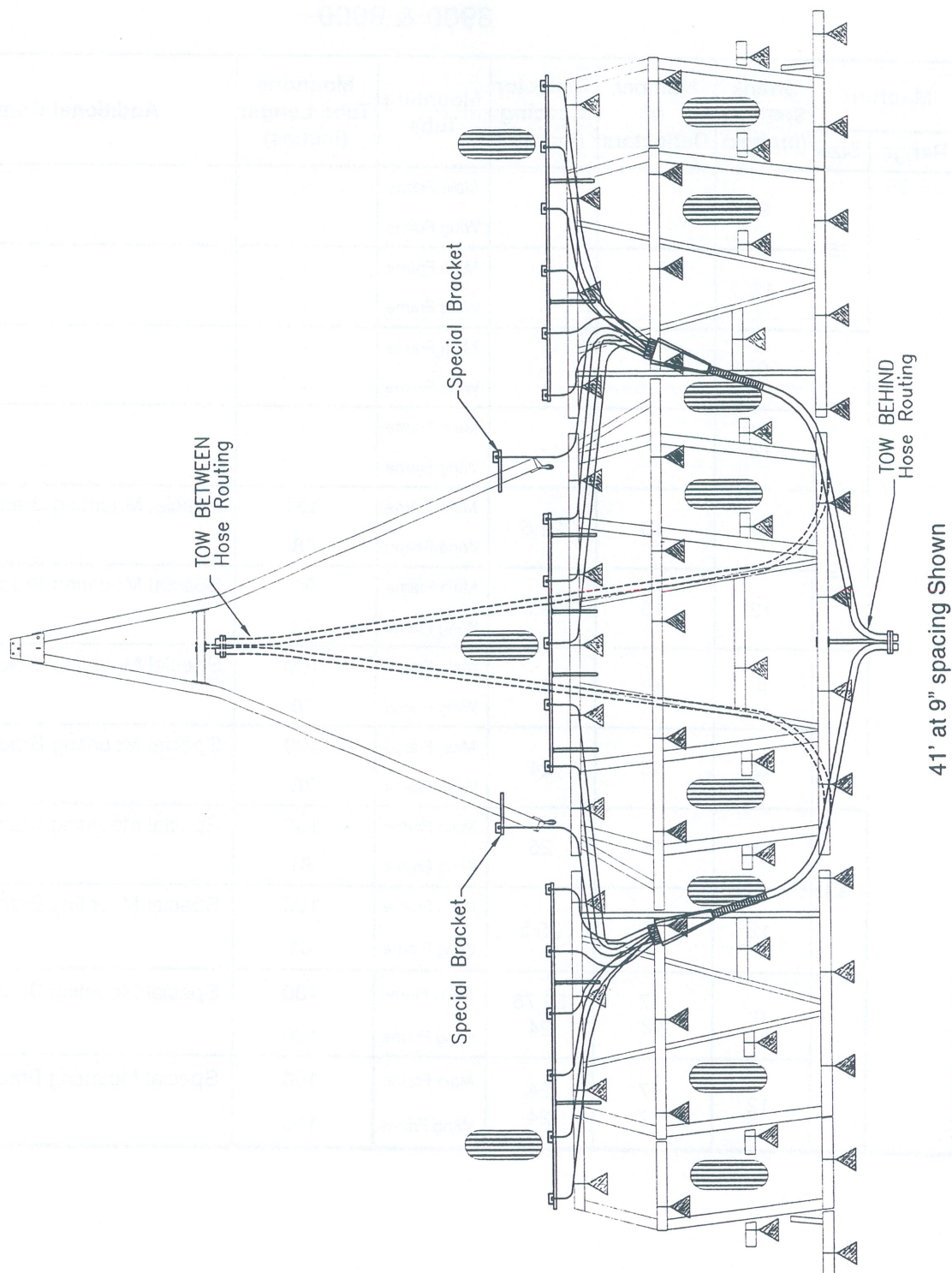
Deflector and Secondary Head Locations

8900 & 9000						
Machine		Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)
Range	Size					
25-35	25	9	-	-	Main Frame	-
					Wing Frame	-
	25	12	-	-	Main Frame	-
					Wing Frame	-
	27	9	-	-	Main Frame	-
					Wing Frame	-
	27	12	-	-	Main Frame	-
					Wing Frame	-
	29	9	15	21.5	Main Frame	131
					Wing Frame	68
	29	12	15	22.5	Main Frame	94
					Wing Frame	72
	31	9	15	24	Main Frame	100
					Wing Frame	76
	31	12	15	24	Main Frame	100
					Wing Frame	76
	33	9	15	25	Main Frame	106
					Wing Frame	81
	33	12	15	25.5	Main Frame	106
					Wing Frame	81
	35	9	17 24	22.75 24	Main Frame	100
					Wing Frame	100
	35	12	17 17	24 24	Main Frame	100
					Wing Frame	100

Hose Routing

Deflector and Secondary Head Locations

Cultivator Model 8900 & 9000 31'-41'



Hose Routing

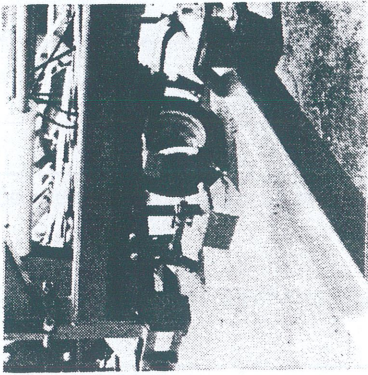
Deflector and Secondary Head Locations

8900 & 9000							
Machine		Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
Range	Size						
31-41	31	9	15	24	Main Frame Wing Frame	100 76	Special Mounting Brackets Required
		12	15	24	Main Frame Wing Frame	100 76	Special Mounting Brackets Required
	33	9	15	25	Main Frame Wing Frame	106 81	Special Mounting Brackets Required
		12	15	25.5	Main Frame Wing Frame	106 81	Special Mounting Brackets Required
	35	9	17	22.75	Main Frame Wing Frame	100 100	Special Mounting Brackets Required
		12	17	24	Main Frame Wing Frame	100 100	Special Mounting Brackets Required
	37	9	17	24.75	Main Frame Wing Frame	106 106	Special Mounting Brackets Required
		12	17	25.5	Main Frame Wing Frame	106 106	Special Mounting Brackets Required
	39	9	19	23.5	Main Frame Wing Frame	100 124	Special Mounting Brackets Required
		12	19	24	Main Frame Wing Frame	100 124	Special Mounting Brackets Required
	41	9	19	24.5	Main Frame Wing Frame	106 131	Special Mounting Brackets Required
		12	19	25.5	Main Frame Wing Frame	106 131	Special Mounting Brackets Required

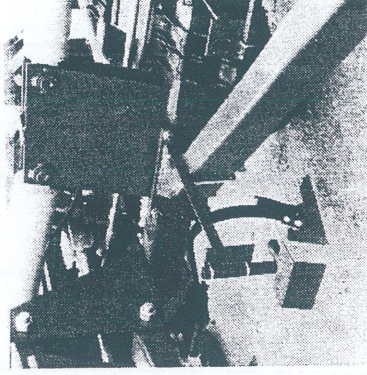
Hose Routing

Deflector and Secondary Head Locations

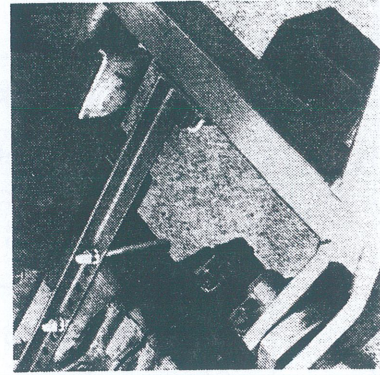
Cultivator Model 8900 & 9000 43'-47'



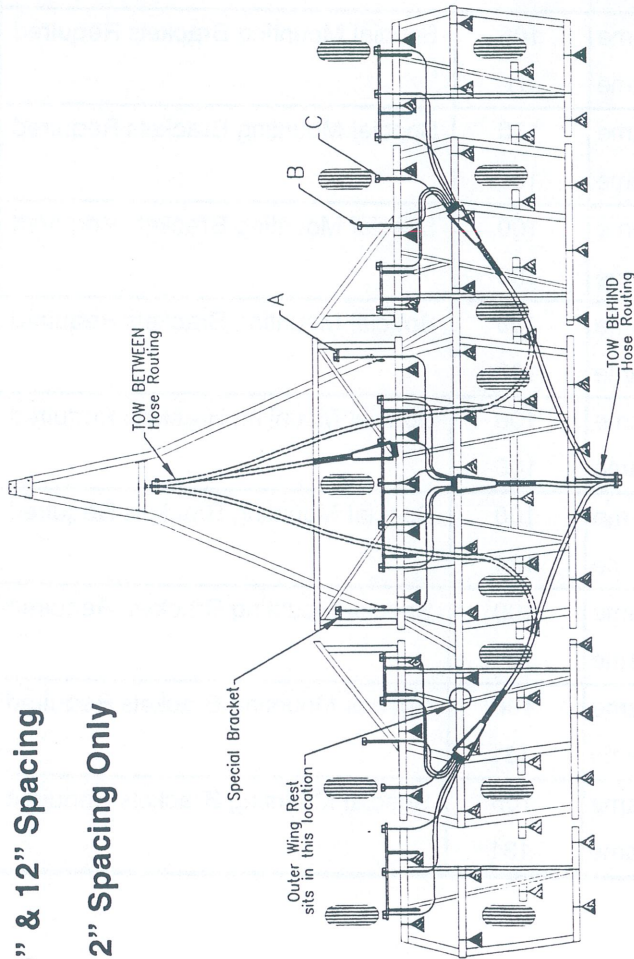
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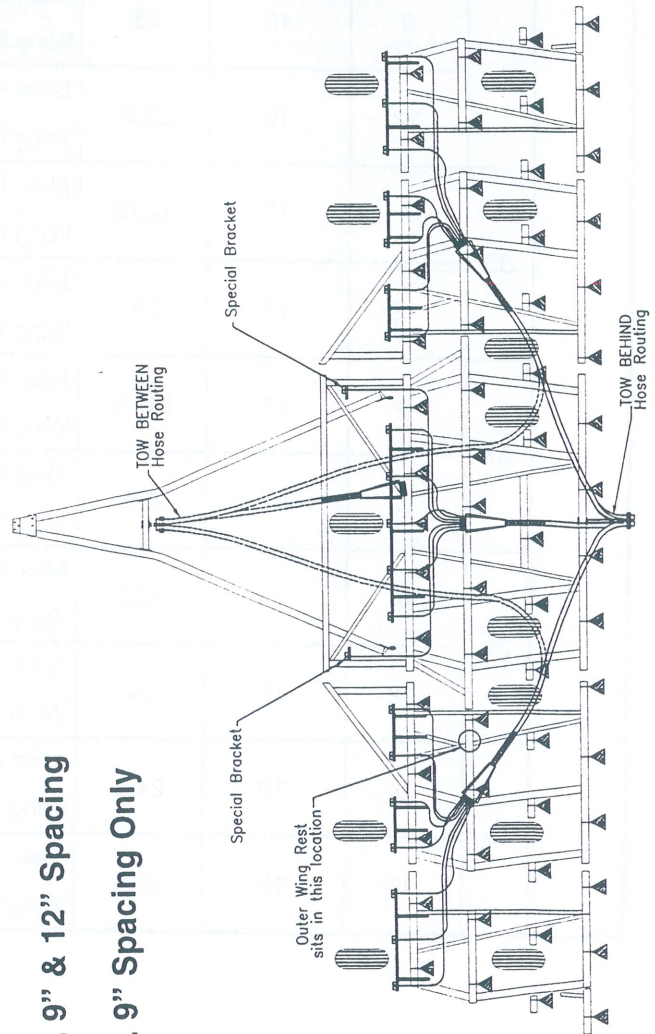
B



C



43 Ft. 9" & 12" Spacing
47 Ft. 12" Spacing Only



45 Ft. 9" & 12" Spacing
47 Ft. 9" Spacing Only

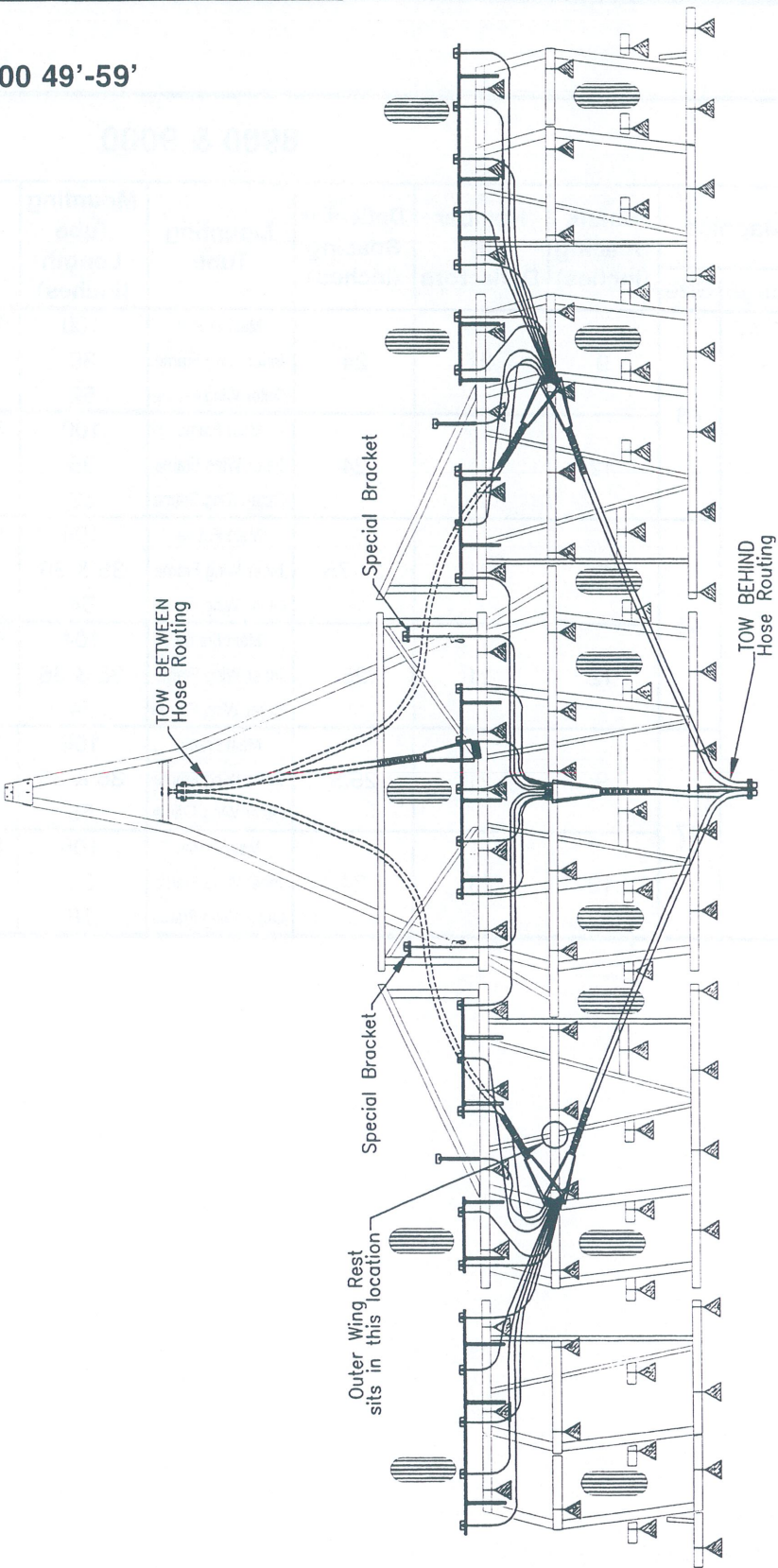
Deflector and Secondary Head Locations

8900 & 9000							
Machine		Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
Range	Size						
43-47	43	9	21	24	Main Frame	100	Special Mounting Brackets Required Plus Two (2) Mounting Brackets
					Inner Wing Frame	36	
					Outer Wing Frame	52	
		12	21	24	Main Frame	100	Special Mounting Brackets Required Plus Two (2) Mounting Brackets
	Inner Wing Frame				36		
	Outer Wing Frame				52		
	45	9	21	24.75	Main Frame	104	Special Mounting Brackets Required
					Inner Wing Frame	36 & 36	
Outer Wing Frame					54		
12		21	25	Main Frame	104	Special Mounting Brackets Required	
	Inner Wing Frame			36 & 36			
	Outer Wing Frame			54			
47	9	21	25.5	Main Frame	106	Special Mounting Brackets Required	
				Inner Wing Frame	36 & 36		
				Outer Wing Frame	55		
	12	23	24	Main Frame	106	Special Mounting Brackets Required Plus Two (2) Mounting Brackets	
Inner Wing Frame				36			
Outer Wing Frame				76			

Hose Routing

Deflector and Secondary Head Locations

Cultivator Model 8900 & 9000 49'-59'



59' at 9" spacing Shown

Hose Routing

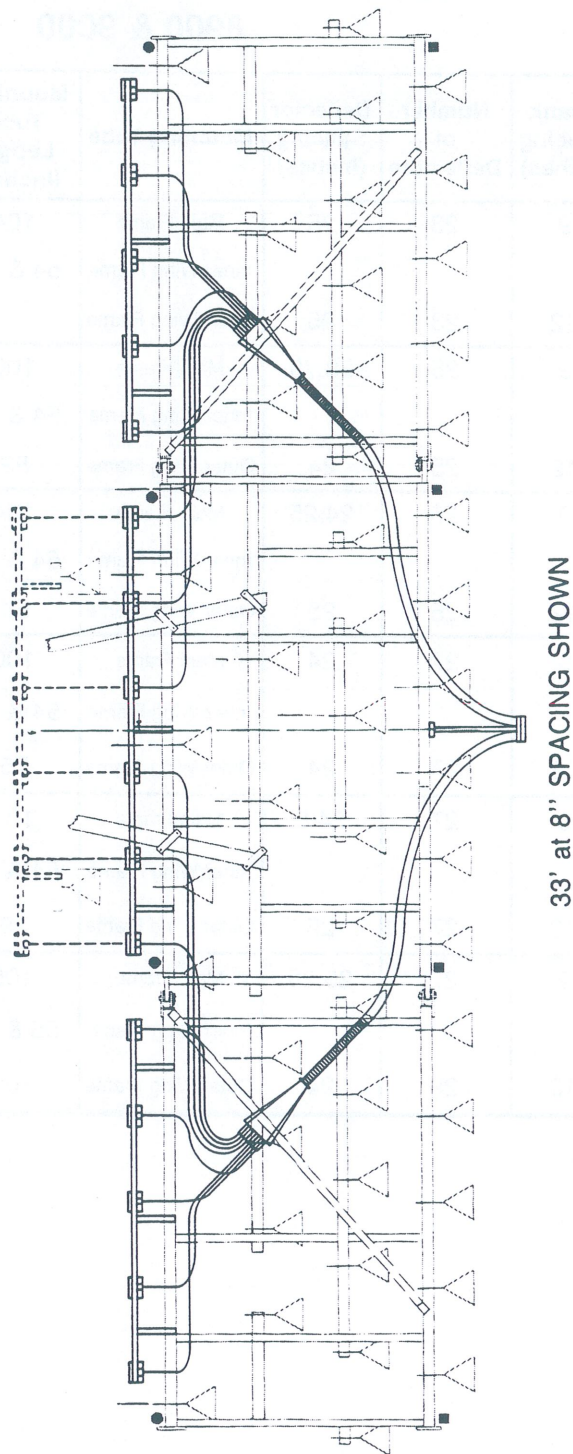
Deflector and Secondary Head Locations

8900 & 9000							
Machine		Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
Range	Size						
49-59	49	9	23	25	Main Frame	104	Special Mounting Brackets Required Use Single Bracket
					Inner Wing Frame	54 & 36	
		12	23	25	Outer Wing Frame	-	
	51	9	25	23.75	Main Frame	100	Special Mounting Brackets Required
		12	25	24	Outer Wing Frame	52	
	53	9	25	24.25	Main Frame	104	Special Mounting Brackets Required
		12	25	25	Outer Wing Frame	54	
	55	9	27	24	Main Frame	100	Special Mounting Brackets Required
		12	27	24	Outer Wing Frame	76	
	57	9	27	24.5	Main Frame	104	Special Mounting Brackets Required
		12	27	25	Outer Wing Frame	79	
	59	9	27	25.25	Main Frame	105	Special Mounting Brackets Required
		12	29	24	Outer Wing Frame	100	

Hose Routing

Deflector and Secondary Head Locations

Cultivator Model Challenger II



Deflector and Secondary Head Locations

Challenger II Cultivator							
Machine		Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
Range	Size						
L-225	25	8	-	-	Main Frame	-	-
					Wing Frame	-	-
	29	8	14	24.5	Main Frame	127	-
					Wing Frame	78	-
L-233	33	8	16	24.5	Main Frame	127	-
					Wing Frame	102	-
	37	8	18	24.5	Main Frame	127	-
					Wing Frame	127	-
L-242	42	8	20	24.5	Main Frame	176	-
					Wing Frame	29 & 78	-

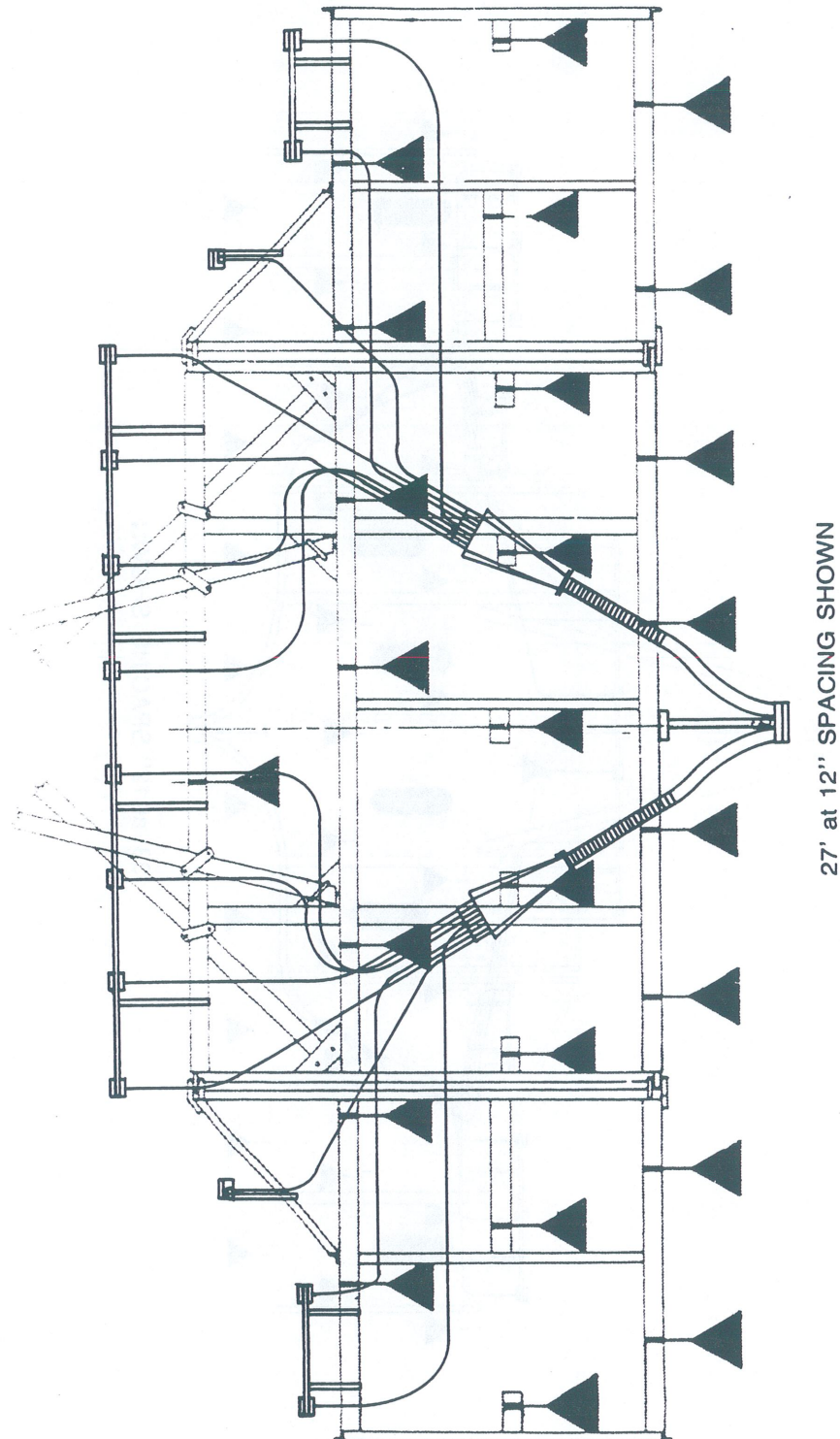
Hose Routing

Deflector and Secondary Head Locations

Magnum I & II Chisel Plow							
Machine		Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
Range	Size						
CP-725	25	12	-	-	Main Frame Wing Frame	- -	- -
	27	12	14	22.5	Main Frame Wing Frame	162 28	See Page 29 Plus use 1 Single Bracket
	29	12	14	24	Main Frame Wing Frame	170 52	See Page 29
CP-731	31	12	15	24	Main Frame Wing Frame	148 28	See Page 31 Plus use 1 Single Bracket
	33	12	16	24	Main Frame Wing Frame	124 28 & 52	See Page 30
	35	12	17	24	Main Frame Wing Frame	148 52	See Page 31 Plus use 1 Single Bracket
	37	12	18	24	Main Frame Wing Frame	124 28 & 78	See Page 30
CP-740	40	12	20	23.5	Main Frame Wing Frame	28 & 78 & 28 28 & 78	See Page 32
	42	12	20	24.5	Main Frame Wing Frame	28 & 78 & 28 28 & 78	See Page 32
CP-745	45	12	22	24	Main Frame Inner Wing Frame Outer Wing Frame	170 74 28	See Page 33 Plus use 1 Single Bracket
CP-750	50	12 12	24 17	24 24	Main Frame Inner Wing Frame Outer Wing Frame	28 & 78 & 28 102 34	See Page 33 Plus use 1 Single Bracket

Deflector and Secondary Head Locations

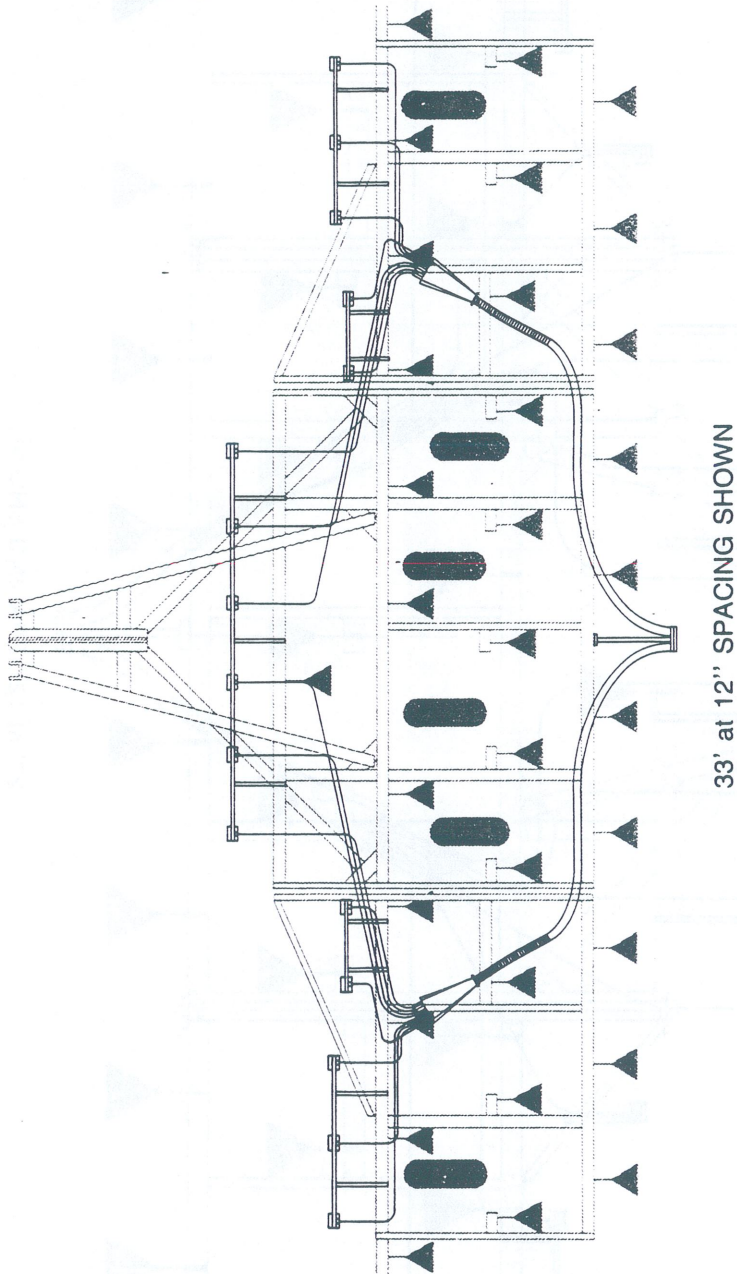
Chisel Plow Model CP-725 (27' & 29')



Hose Routing

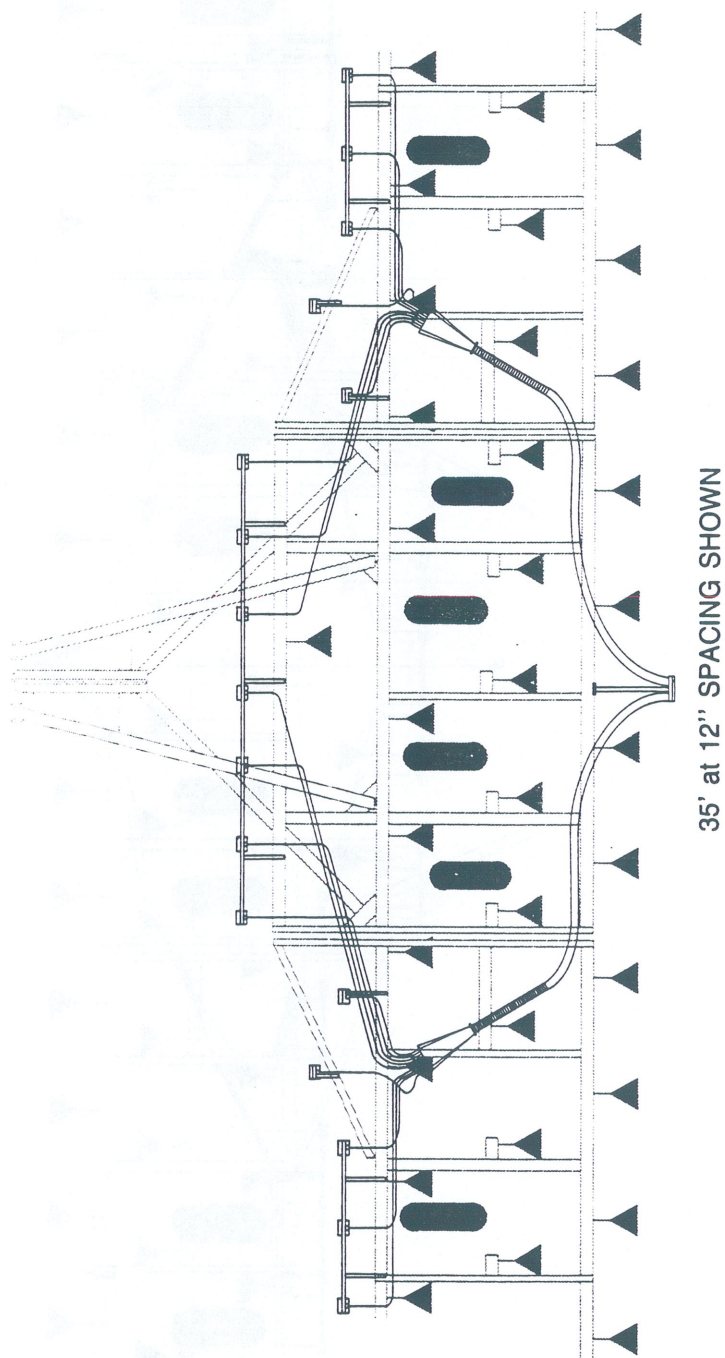
Deflector and Secondary Head Locations

Chisel Plow Model CP-731 (33' & 37')



Deflector and Secondary Head Locations

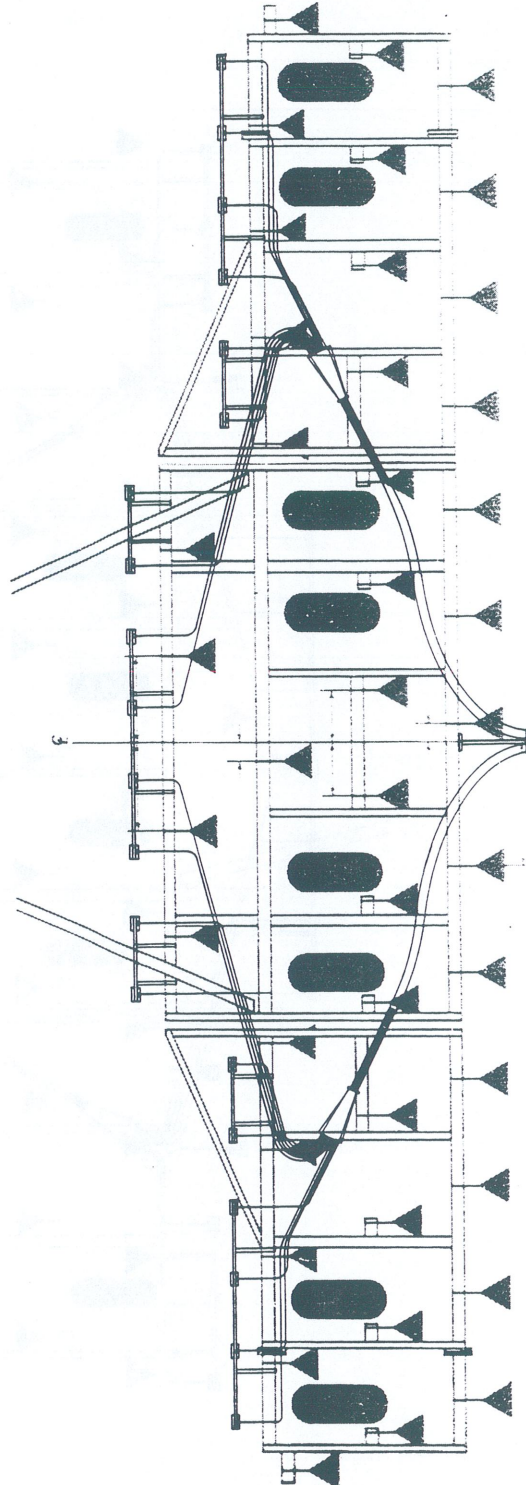
Chisel Plow Model CP-731 (31' & 35')



Hose Routing

Deflector and Secondary Head Locations

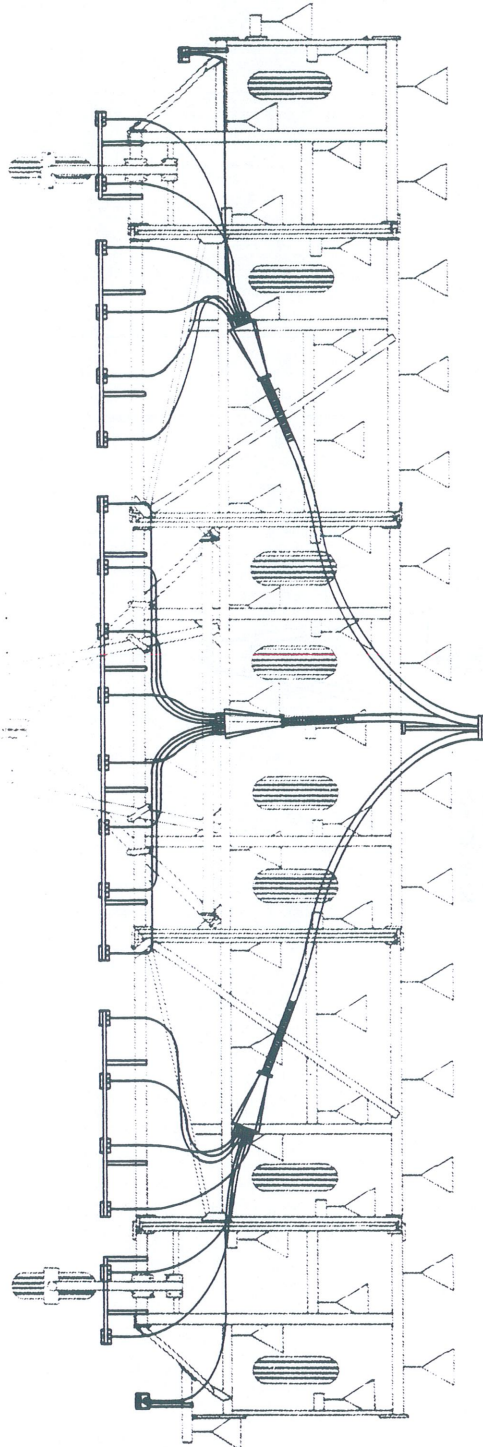
Chisel Plow Model CP-740 (40' & 42')



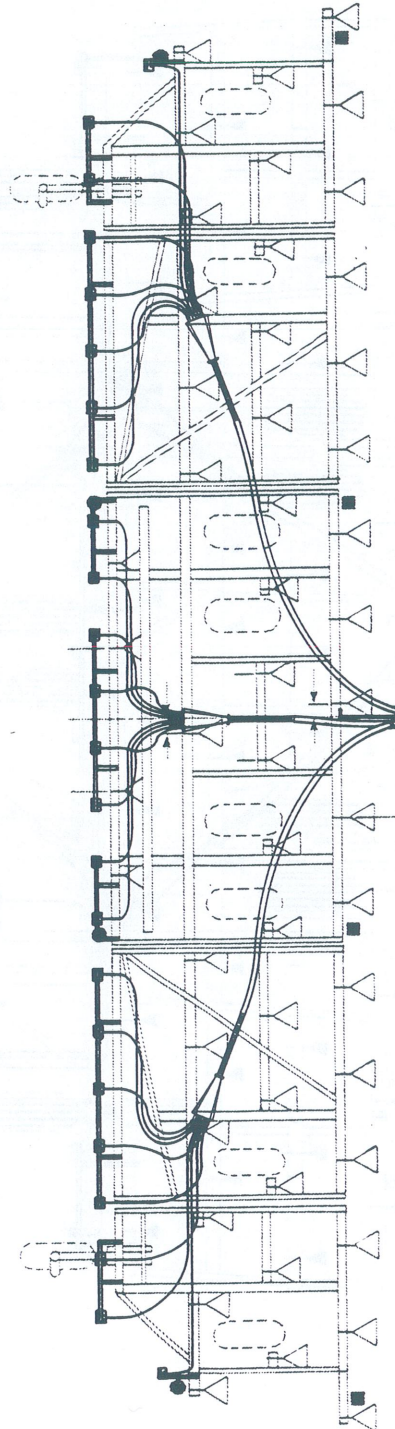
40' at 12" SPACING SHOWN

Deflector and Secondary Head Locations

Chisel Plow Model CP-745



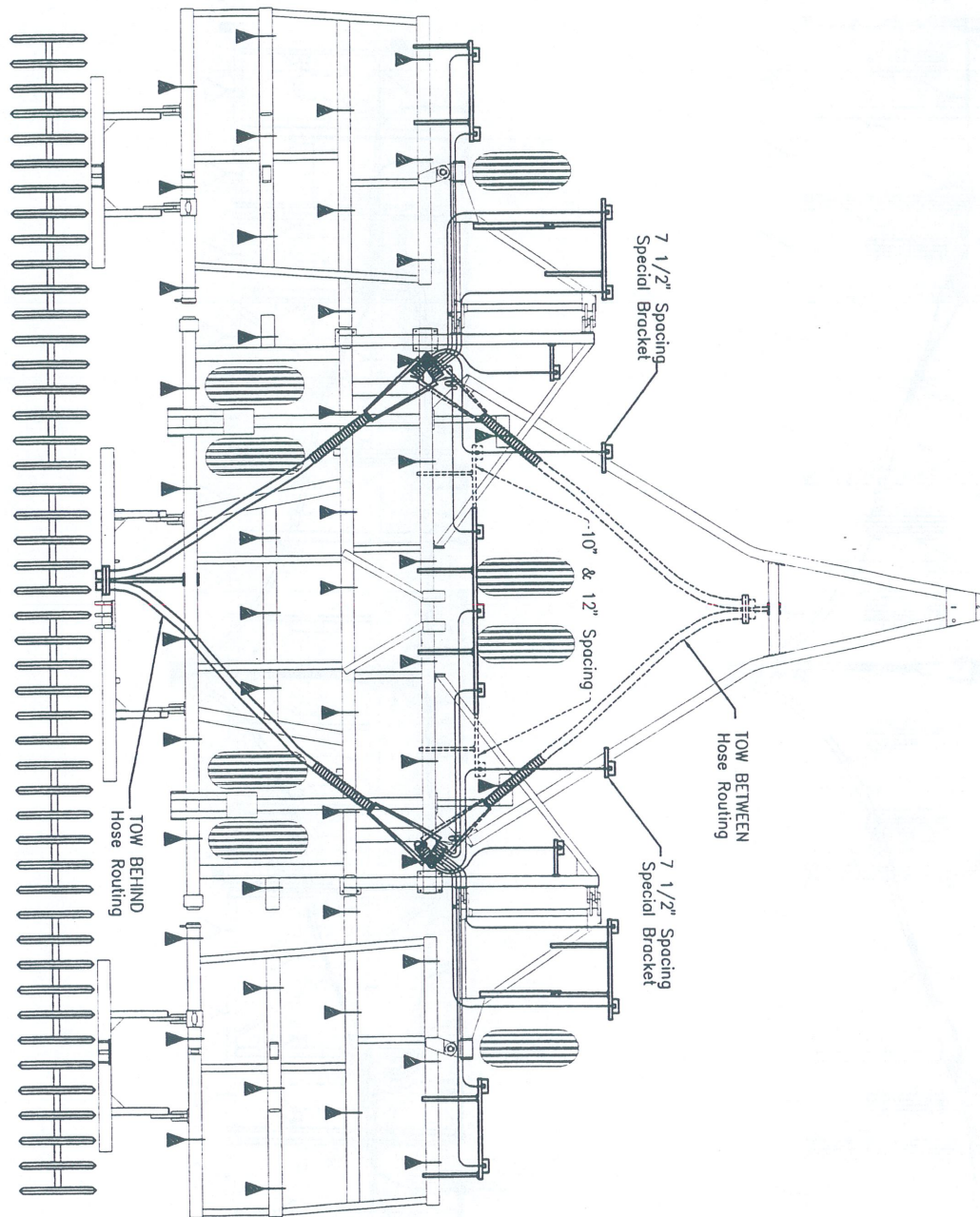
Chisel Plow Model CP-750



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

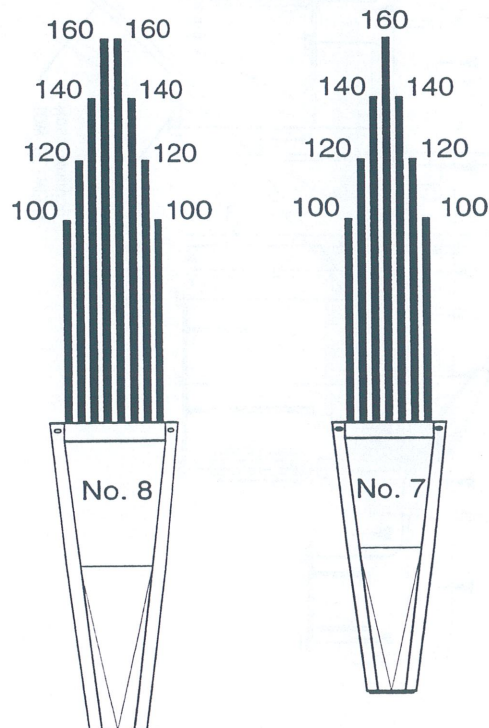
29 foot Maxim Air Drill



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

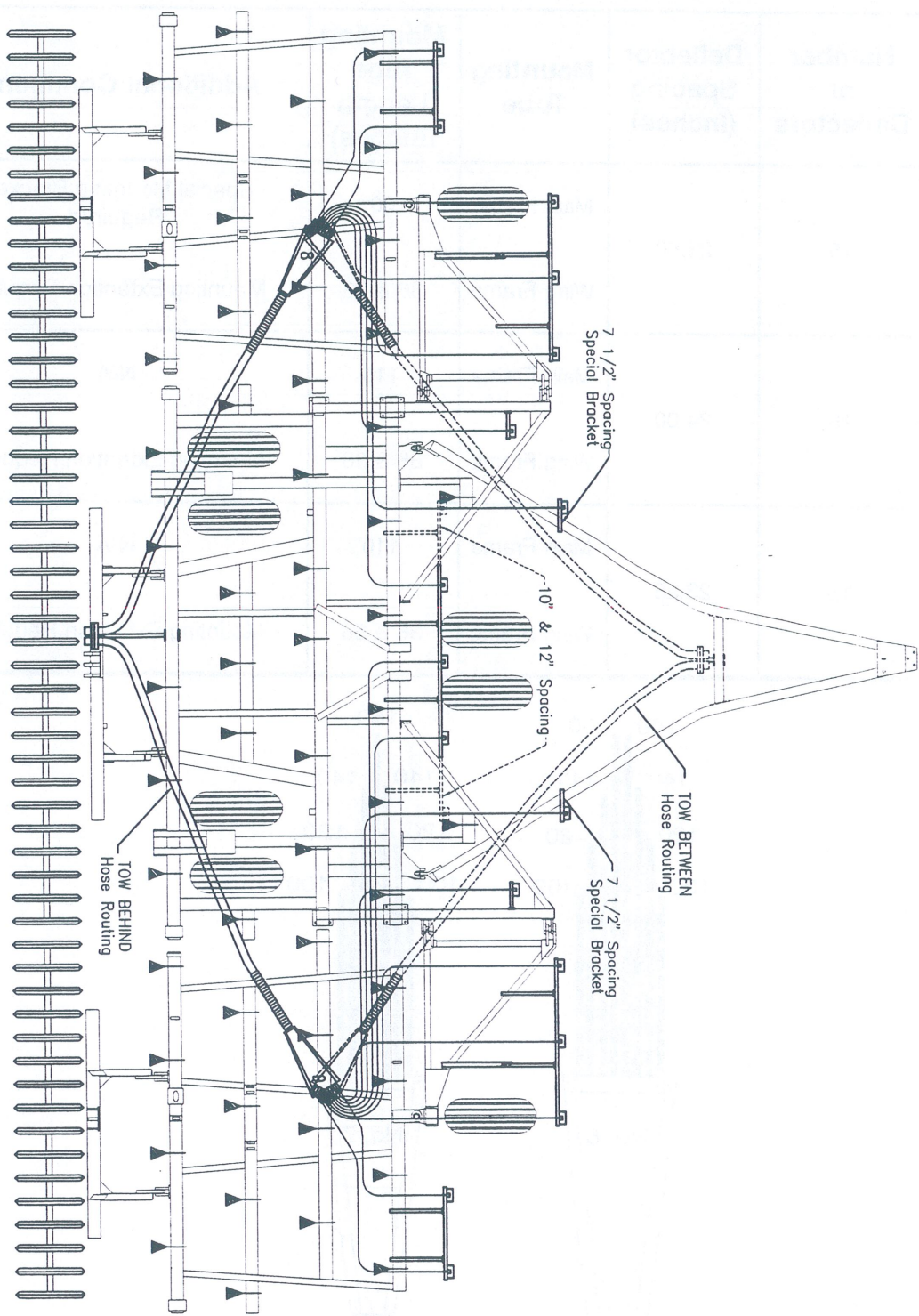
29 Foot Maxim Air Drill					
Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
7 1/2	15	23.50	Main Frame	60	Special Mounting Brackets Required
			Wing Frame	36 & 36	Mounting Extension Required
10	15	24.00	Main Frame	110	N/A
			Wing Frame	36 & 36	Mounting Extension Required
12	15	23.25	Main Frame	110	N/A
			Wing Frame	36 & 36	Mounting Extension Required



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

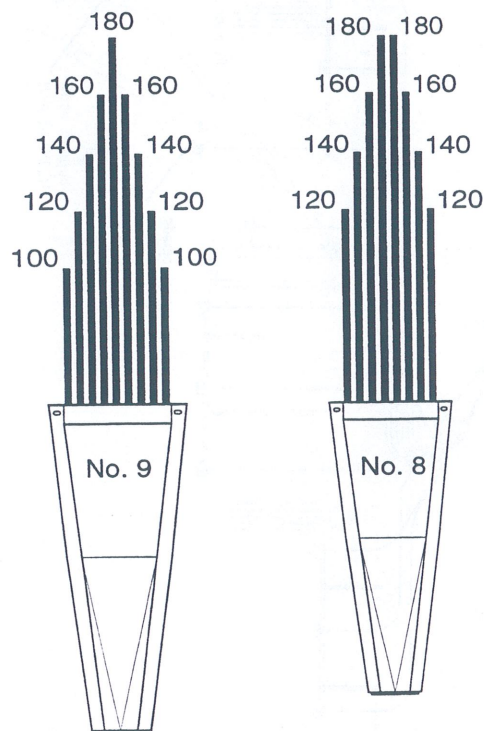
34 Foot Maxim Air Drill



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

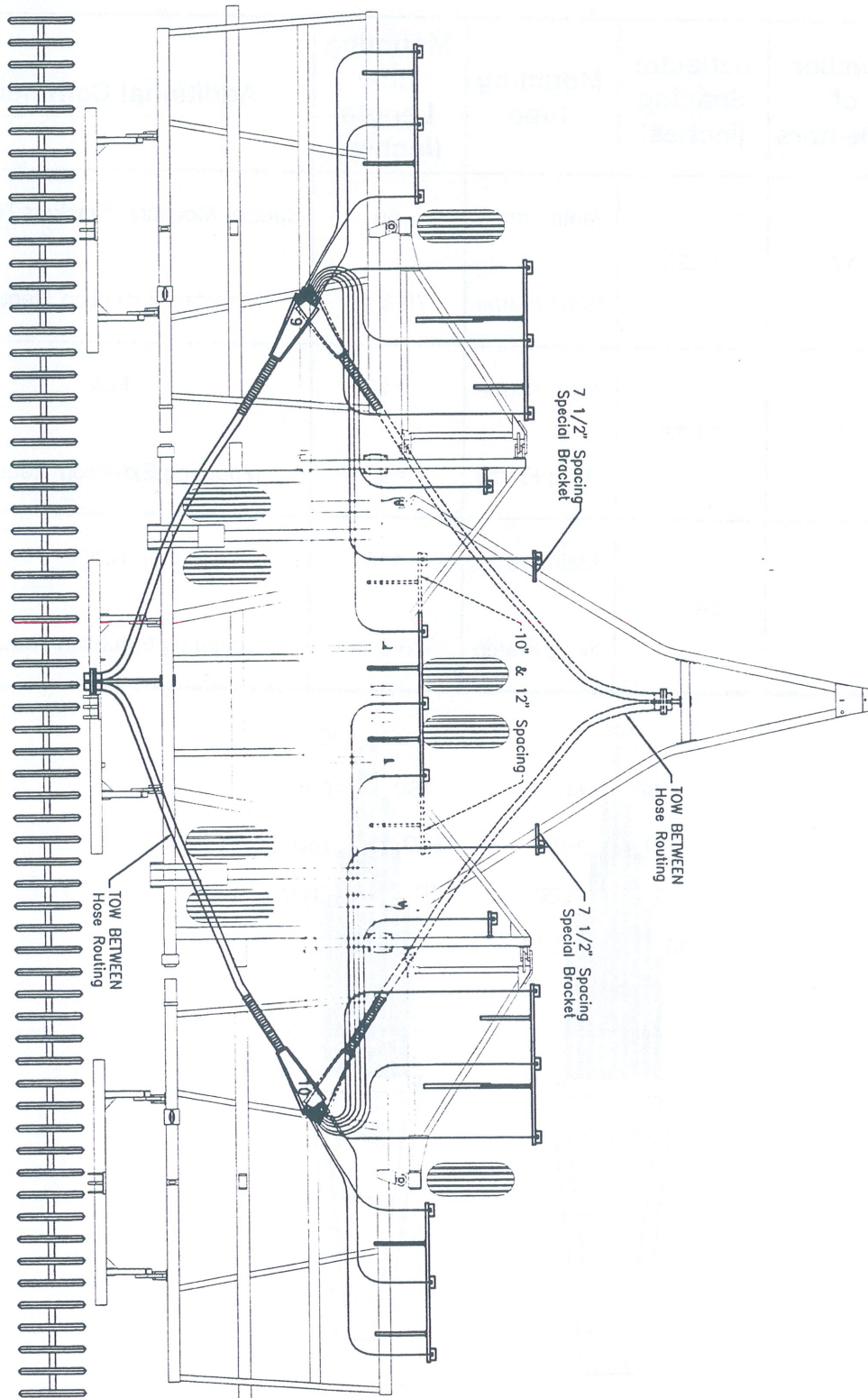
34 Foot Maxim Air Drill					
Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
7 1/2	17	24.25	Main Frame	60	Special Mounting Brackets Required
			Wing Frame	78 & 36	Mounting Extension Required
10	17	24.75	Main Frame	110	N/A
			Wing Frame	78 & 36	Mounting Extension Required
12	17	24.75	Main Frame	110	N/A
			Wing Frame	78 & 36	Mounting Extension Required



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

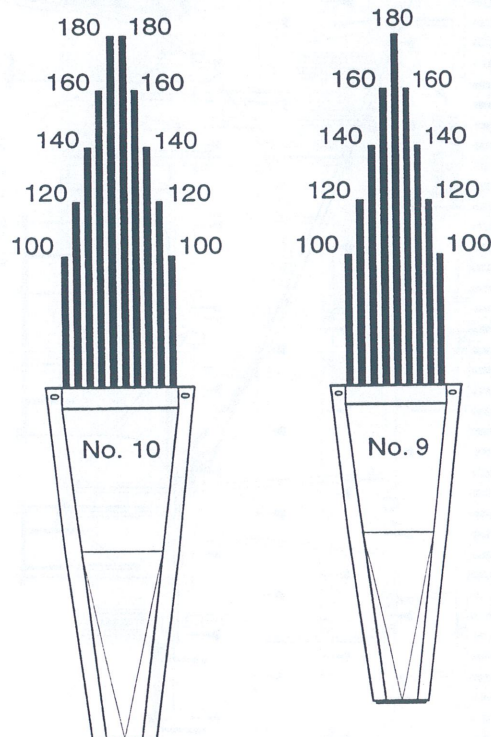
39 Foot Maxim Air Drill



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

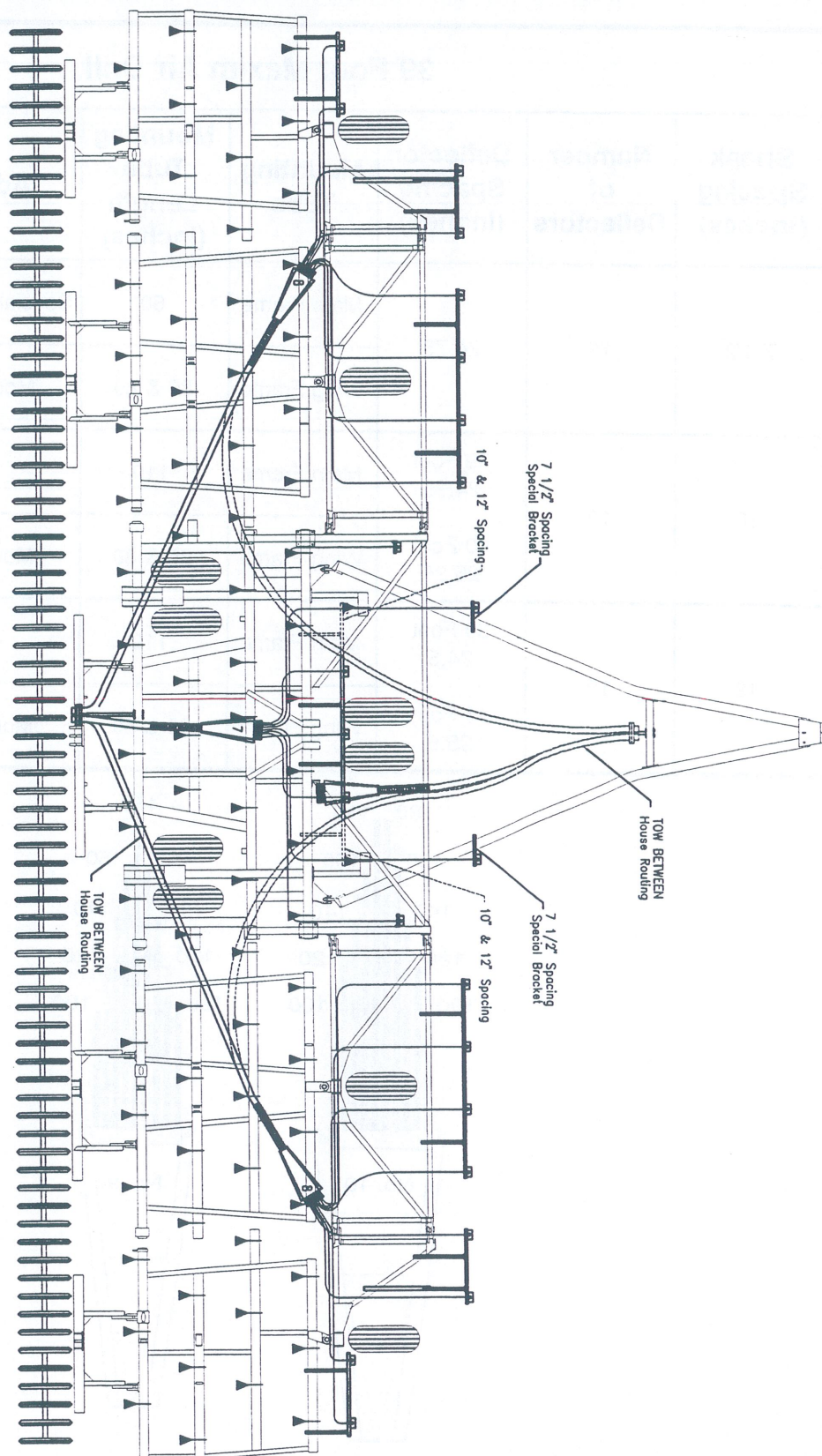
39 Foot Maxim Air Drill					
Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
7 1/2	19	24.75	Main Frame	60	Special Mounting Brackets Required
			Wing Frame	80 & 80	Mounting Extension Required
10	19	39 Foot 24.25	Main Frame	110	N/A
		40 Foot 25.25	Wing Frame	80 & 80	Mounting Extension Required
12	19	39 Foot 24.5	Main Frame	110	N/A
		41 Foot 25.5	Wing Frame	80 & 80	Mounting Extension Required



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

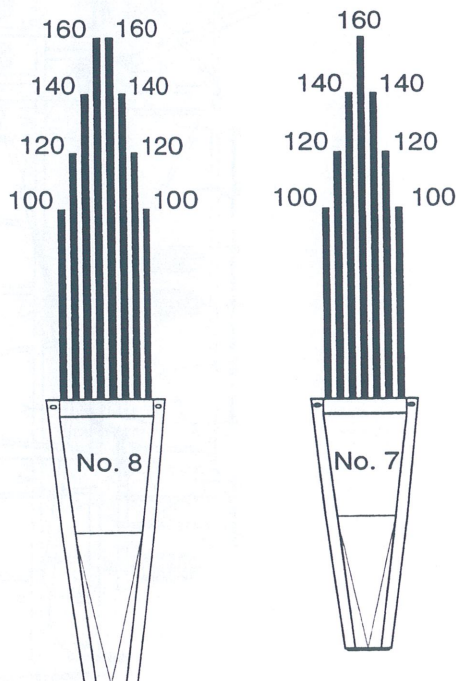
49 Foot Maxim Air Drill



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

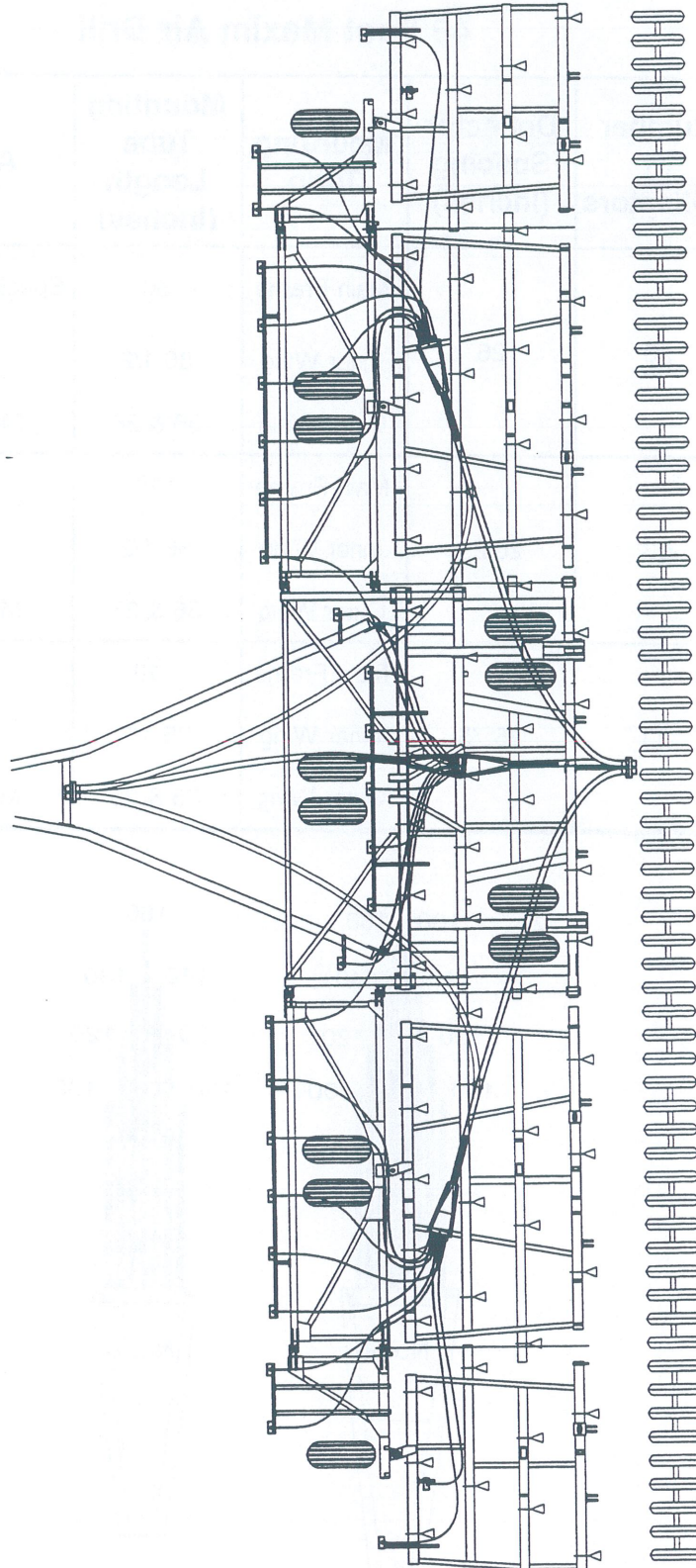
49 Foot Maxim Air Drill					
Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
7 1/2	23	26	Main Frame	60	Special Mounting Brackets Required
			Inner Wing	86 1/2	N/A
			Outer Wing	36 & 36	Mounting Extension Required
10	23	26.25	Main Frame	110	N/A
			Inner Wing	86 1/2	N/A
			Outer Wing	36 & 36	Mounting Extension Required
12	23	25.75	Main Frame	110	N/A
			Inner Wing	86 1/2	N/A
			Outer Wing	36 & 36	Mounting Extension Required



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

55 Foot Maxim Air Drill



Hose Routing

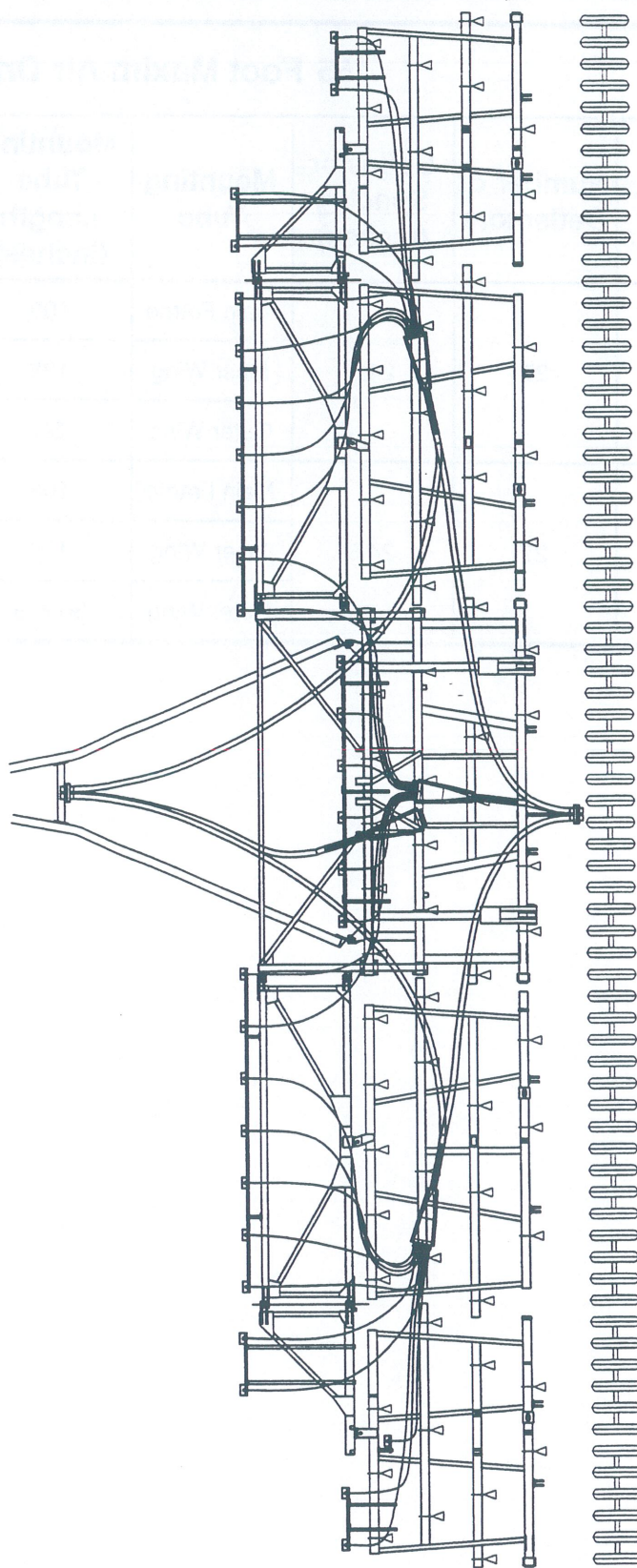
Maxim Air Drill Deflector and Secondary Head Locations

55 Foot Maxim Air Drill					
Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
10	27	24.5	Main Frame	103	Special Mounting Brackets Required
			Inner Wing	128	N/A
			Outer Wing	30	Special Mounting Brackets Required
12	27	24.5	Main Frame	103	Special Mounting Brackets Required
			Inner Wing	128	N/A
			Outer Wing	30 & 9	Special Mounting Brackets Required

Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

60 Foot Maxim Air Drill



Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

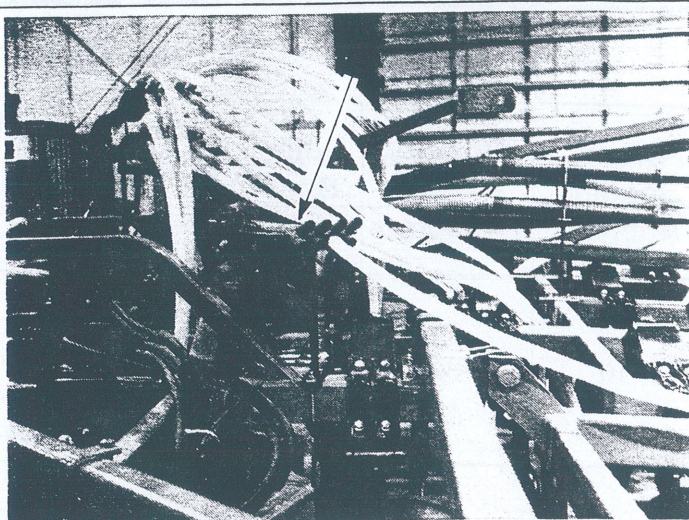
60 Foot Maxim Air Drill					
Shank Spacing (Inches)	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
10	30	24	Main Frame	125	N/A
			Inner Wing	149	N/A
			Outer Wing	29 & 29	Special Mounting Brackets Required
12	30	24.5	Main Frame	125	N/A
			Inner Wing	152	N/A
			Outer Wing	29 & 29	Special Mounting Brackets Required

Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

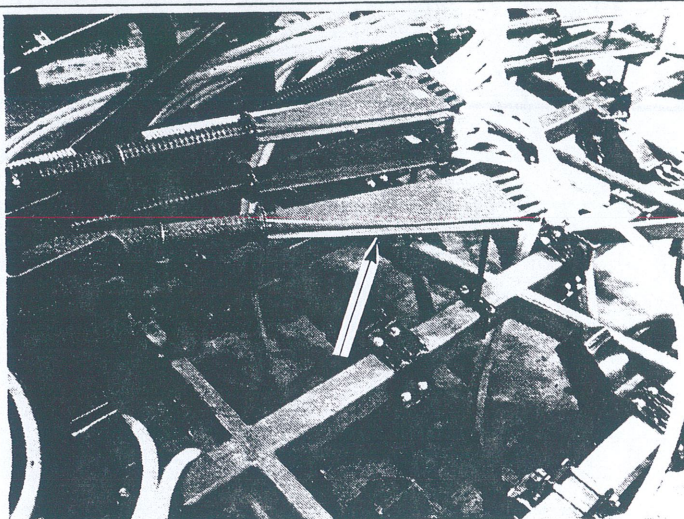
29 Foot

Mount Divider Head on main frame as shown. The head should be tight to the wing lift rest to clear transport tires when raised in field position.



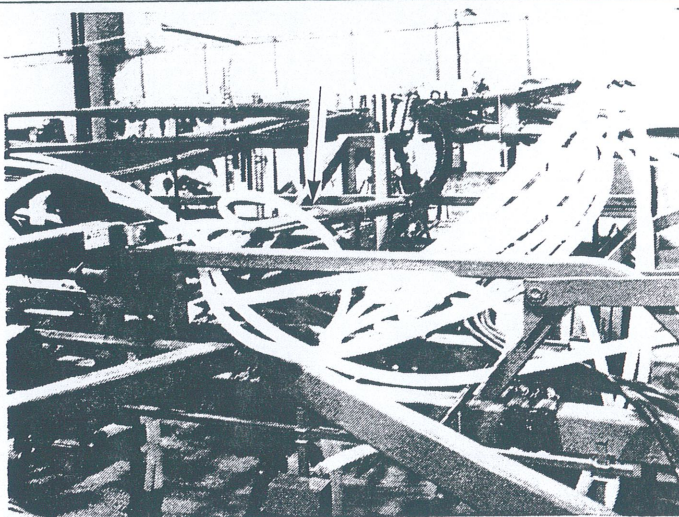
34 Foot and 39 Foot

Mount Divider Head on wing frame as shown.



49 Foot

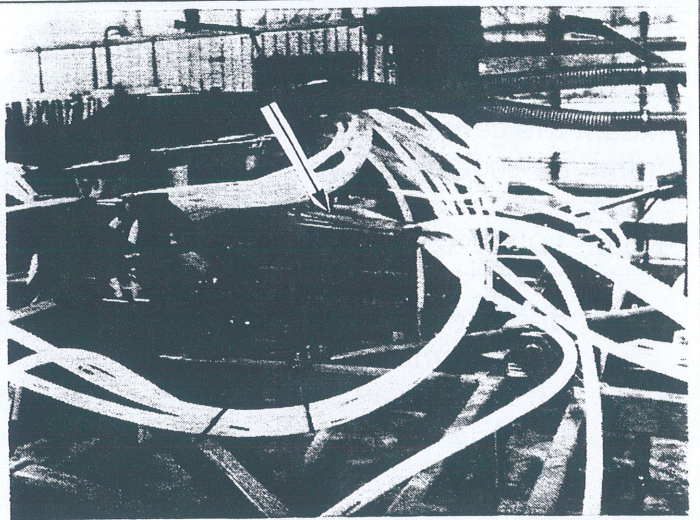
Mount the 7 outlet Divider Head on the main frame as shown.



Maxim Air Drill Deflector and Secondary Head Locations

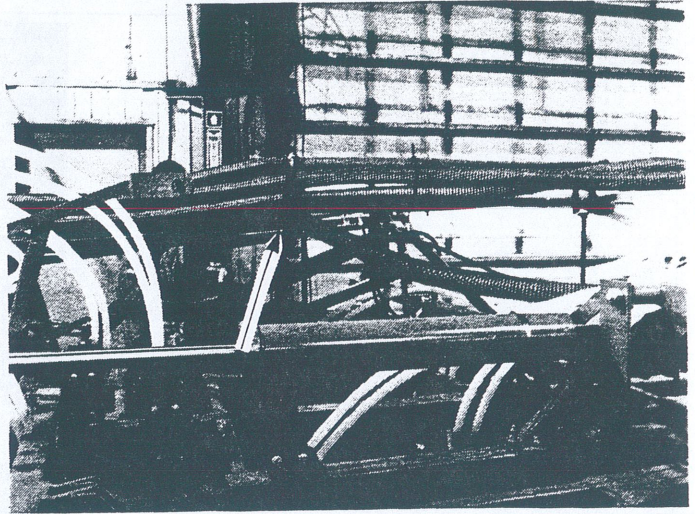
49 Foot

Mount the 8 outlet Divider Heads on the wing frames as shown. Care must be taken when routing the secondary lines to prevent kinking of the hoses.



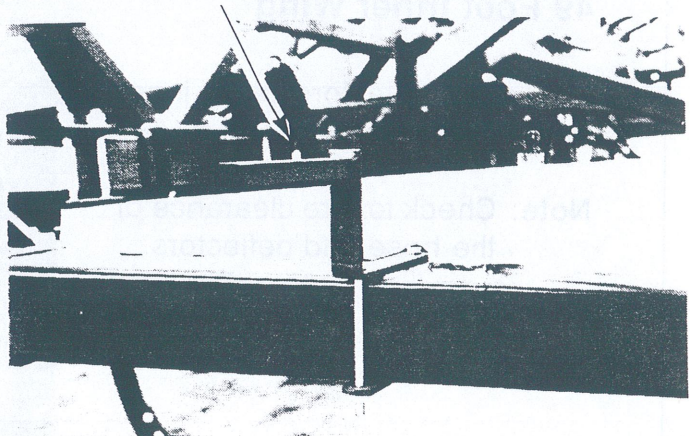
49 Foot

Secure the primary hose to the seed/fertilizer divider heads as shown.



Hitch Bracket

Used on 7 1/2" spacing only. Mount to hitch poles as shown.



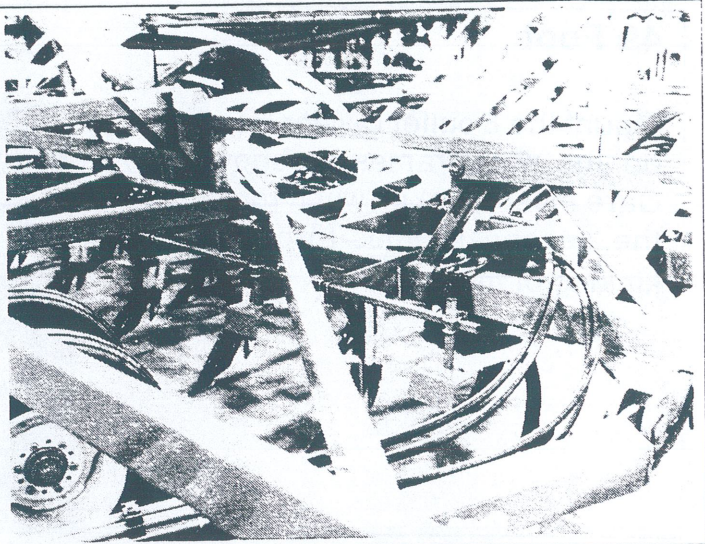
Hose Routing

Maxim Air Drill Deflector and Secondary Head Locations

Main Frame All Models

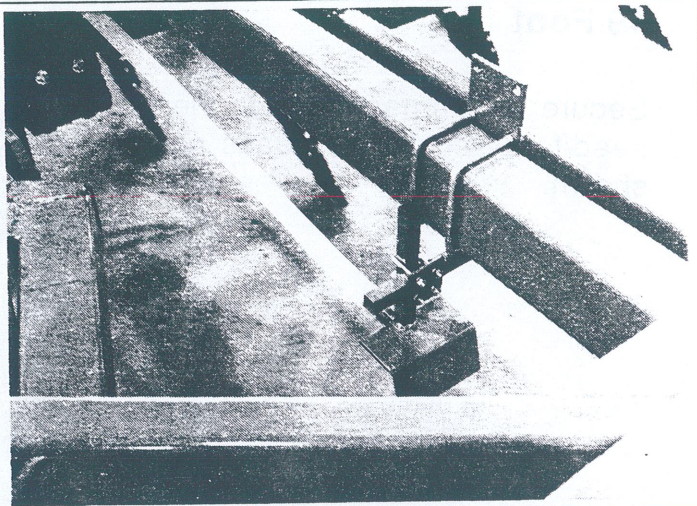
Mount the deflectors close to the frame as shown.

Note: 10" spacing shown. On 7 1/2" spacing the last deflector shown in photo will be mounted on the hitch pole as shown on page 12.



Main Frame All Models

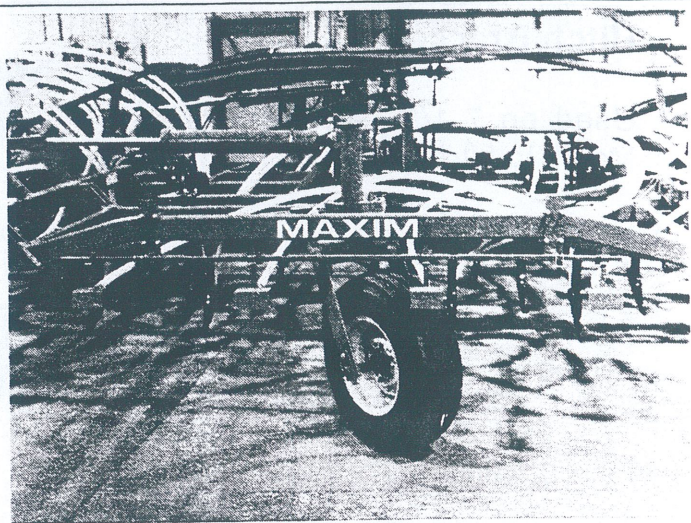
Mount the outer deflector to the main frame hitch truss as shown.



49 Foot Inner Wing

Mount the deflectors to the inner frame hitch truss as shown.

Note: Check for tire clearance of the hose and deflectors.

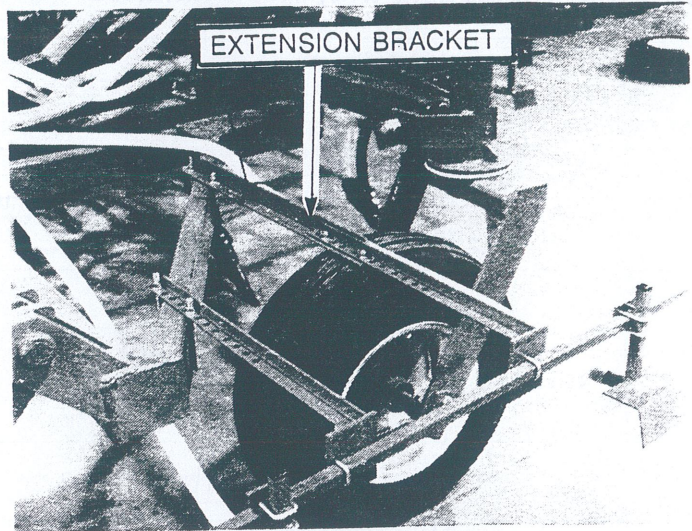


Maxim Air Drill Deflector and Secondary Head Locations

29 Foot, 34 Foot, and 39 Foot Wing Frame. 49 Foot Outer Wing.

Mount the deflectors to the wing frame hitch truss as shown, using mounting extension bracket.

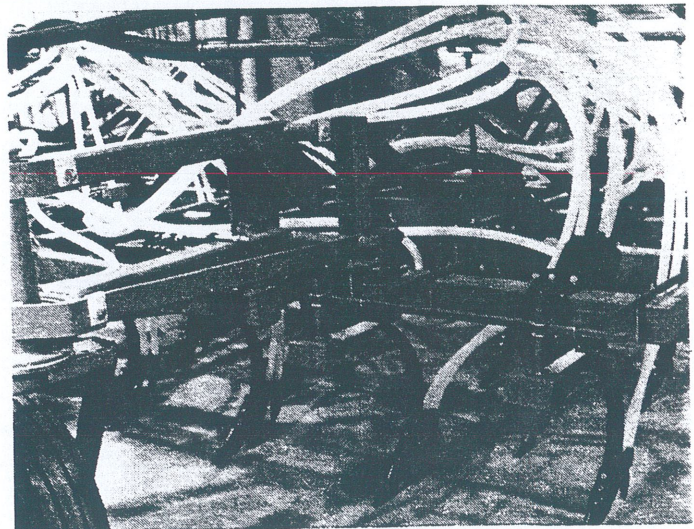
Note: Check for tire clearance of the hose and deflectors.



29 Foot, 34 Foot, and 39 Foot Wing Frame. 49 Foot Outer Wing.

Mount the deflectors close to the wing frame as shown.

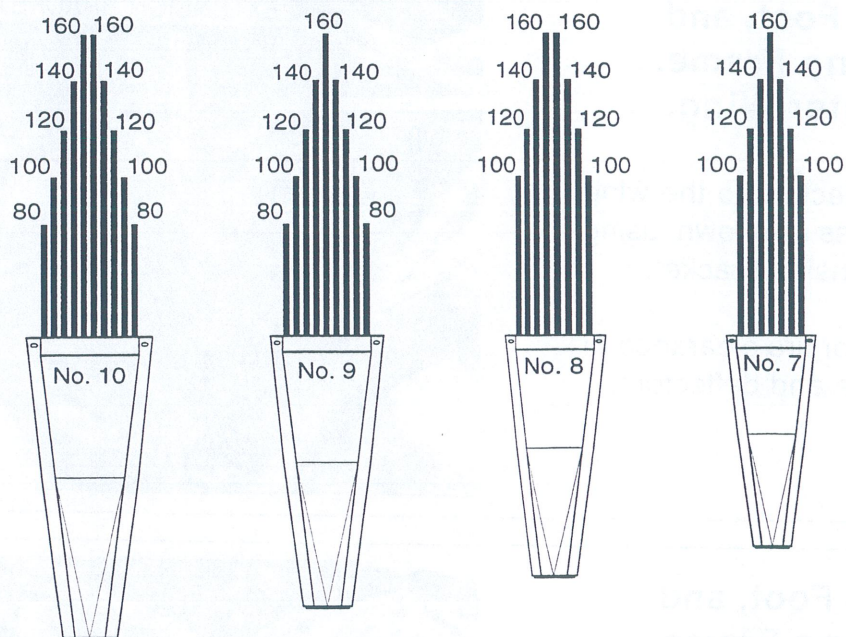
Note: Check for tire clearance of the deflectors.



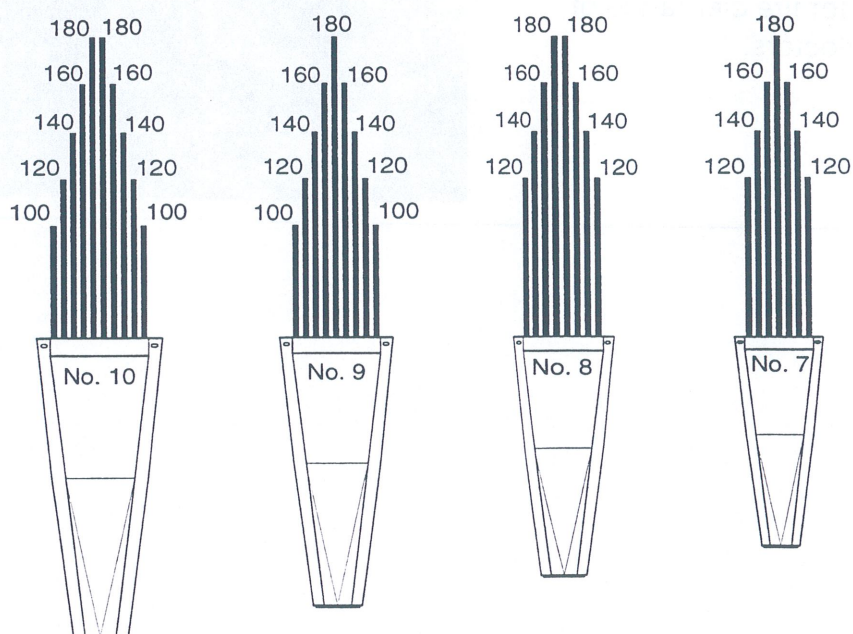
Hose Routing

Concept 2000 - Hose Lengths

Tow Behind Models with Two Primaries

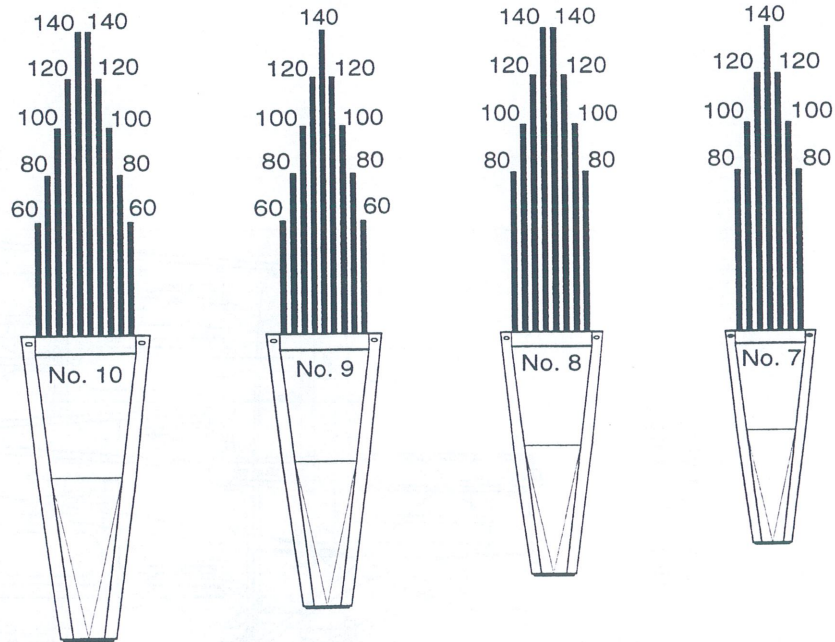


Tow Between Models with Two Primaries

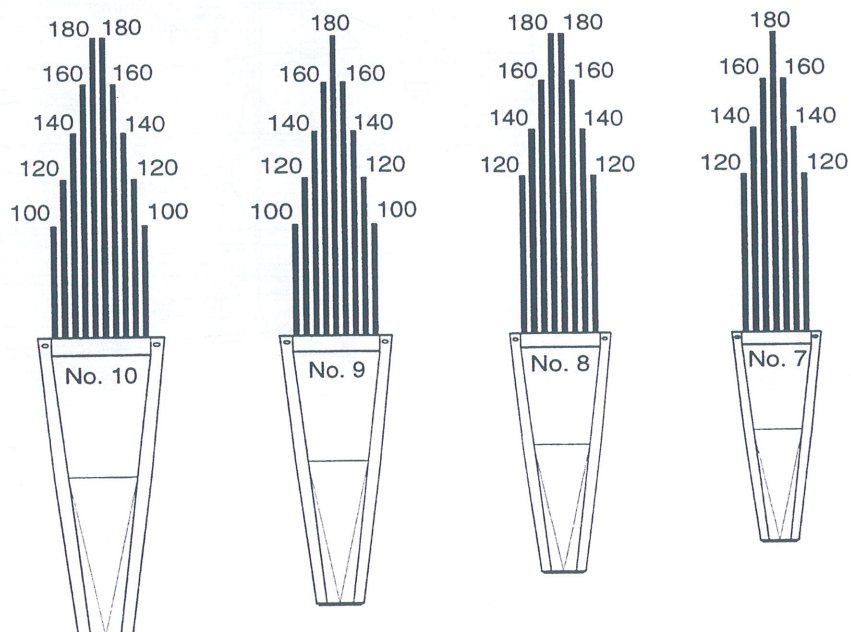


Concept 2000 - Hose Lengths

Three Frame Models with Three Primaries



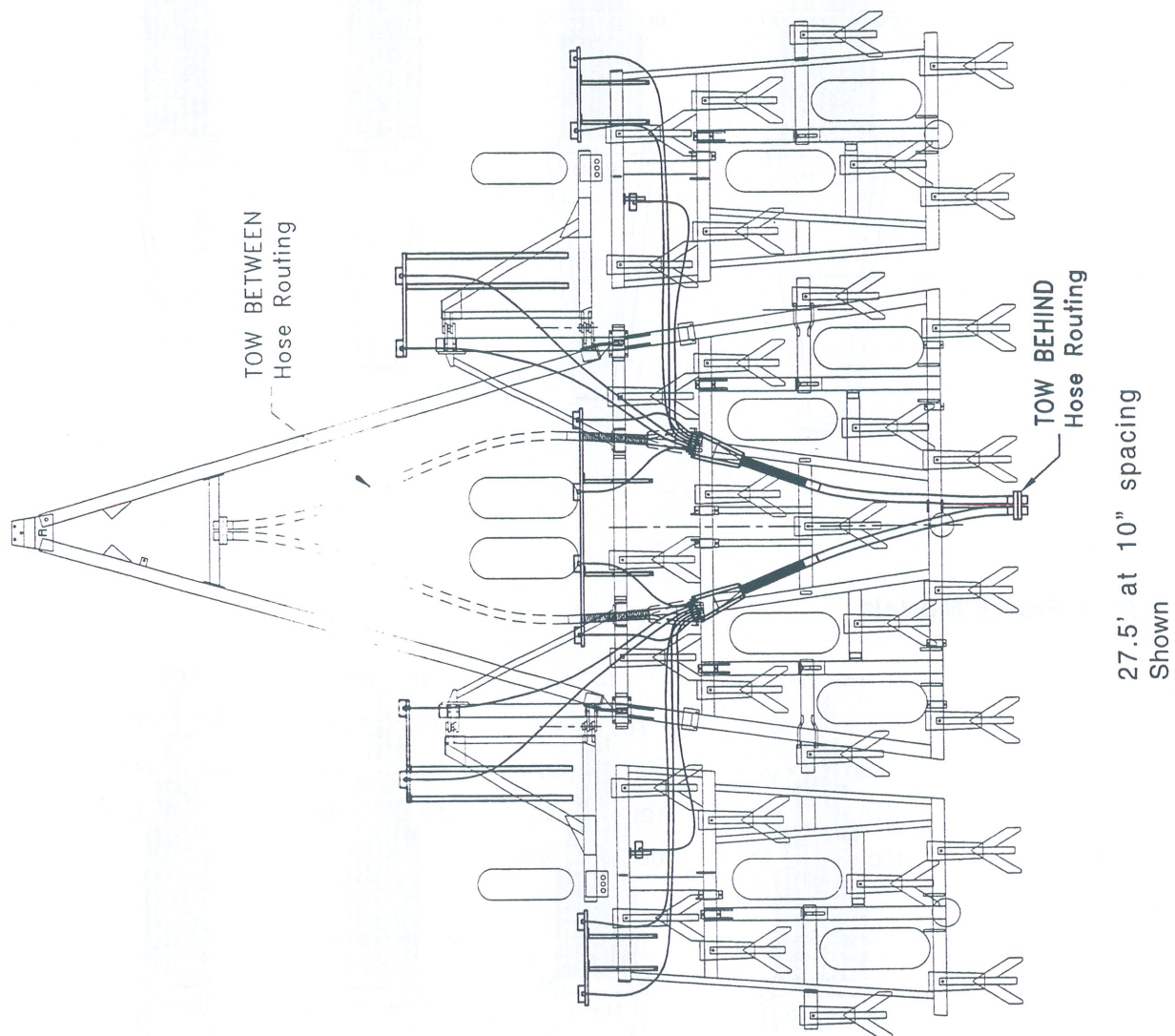
Five Frame Models



Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 23 Foot Base



Note: See page 64 for assembly details.

Hose Routing

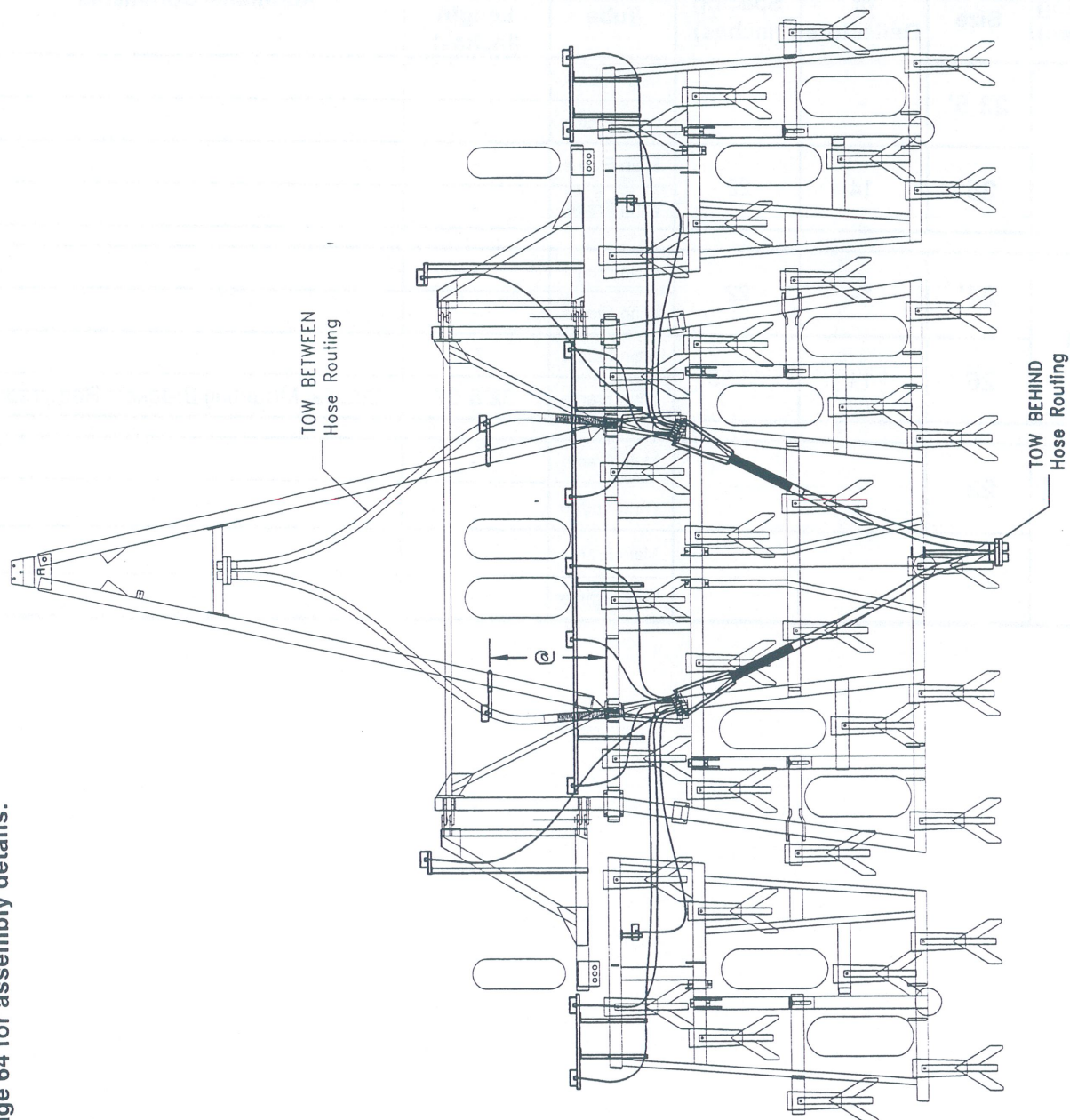
Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 23 Foot Base						
Shank Spacing (Inches)	Machine Size	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
9	23.5'	-	-	Main Frame	-	-
				Wing Frame	-	-
	25'	14	22	Main Frame	-	-
				Wing Frame	-	-
10	24'	14	22	Main Frame	-	-
				Wing Frame	-	-
	26'	14	23.25	Main Frame	71	-
				Wing Frame	32 & 27	Special Mounting Brackets Required
12	23'	-	-	Main Frame	-	-
				Wing Frame	-	-
	25'	-	-	Main Frame	-	-
				Wing Frame	-	-

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 26 Foot Base



Note: See page 64 for assembly details.

Hose Routing

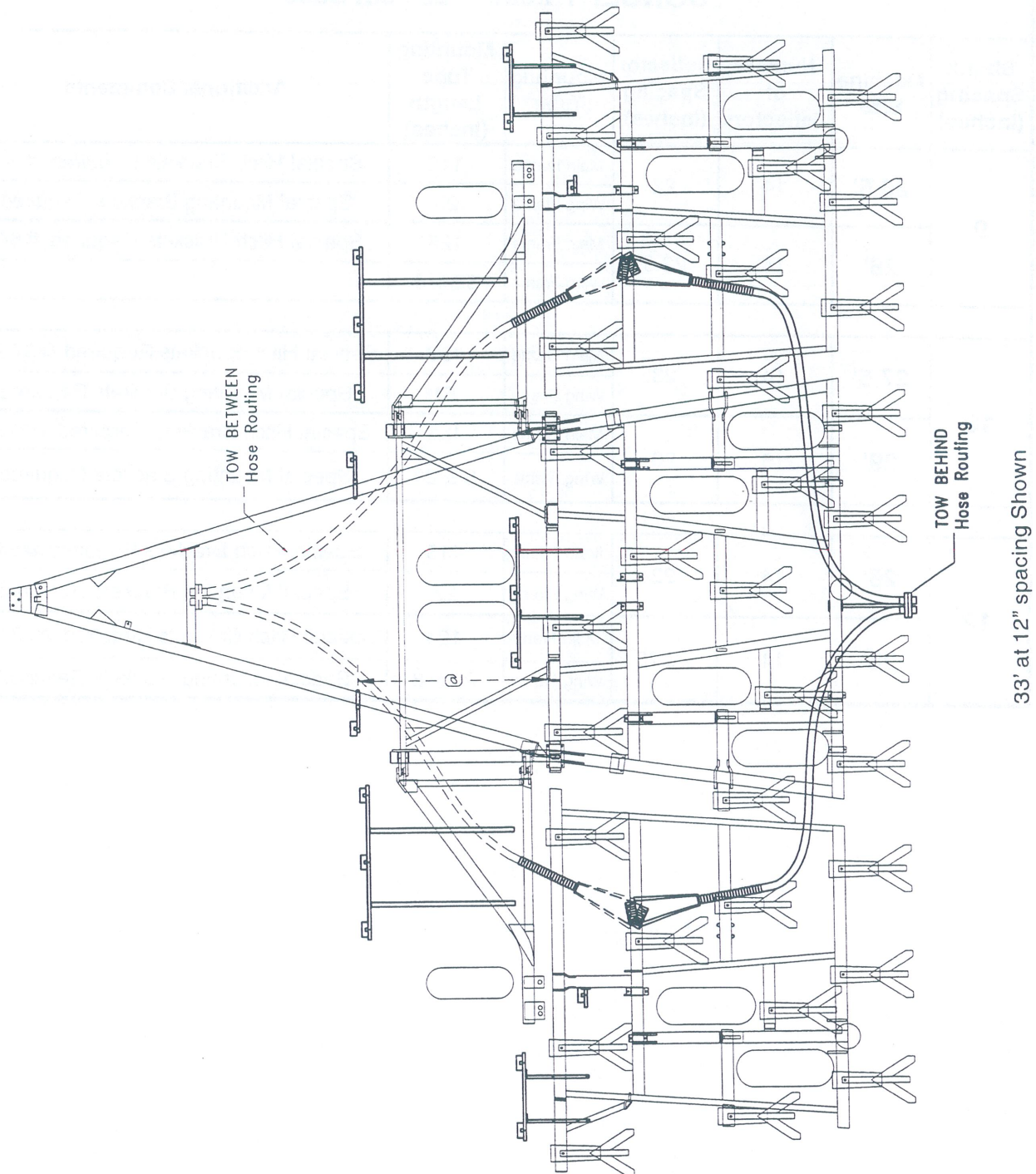
Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 26 Foot Base						
Shank Spacing (Inches)	Machine Size	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
9	26.5'	14	22	Main Frame	115	Special Hitch Brackets Required @94"
				Wing Frame	28	Special Mounting Brackets Required
	28'	14	23.5	Main Frame	123	Special Hitch Brackets Required @84"
				Wing Frame	52 & 8	-
10	27.5'	14	23	Main Frame	129	Special Hitch Brackets Required @87.25"
				Wing Frame	51	Special Mounting Brackets Required
	29'	15	23	Main Frame	142	Special Hitch Brackets Required @37.5"
				Wing Frame	8 & 28	Special Mounting Brackets Required
12	26'	14	22	Main Frame	115	Special Hitch Brackets Required @94"
				Wing Frame	27	Special Mounting Brackets Required
	28'	14	23.75	Main Frame	124	Special Hitch Brackets Required @82.25"
				Wing Frame	29 & 8	Special Mounting Brackets Required

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 29 Foot Base



Note: See page 64 for assembly details.

Hose Routing

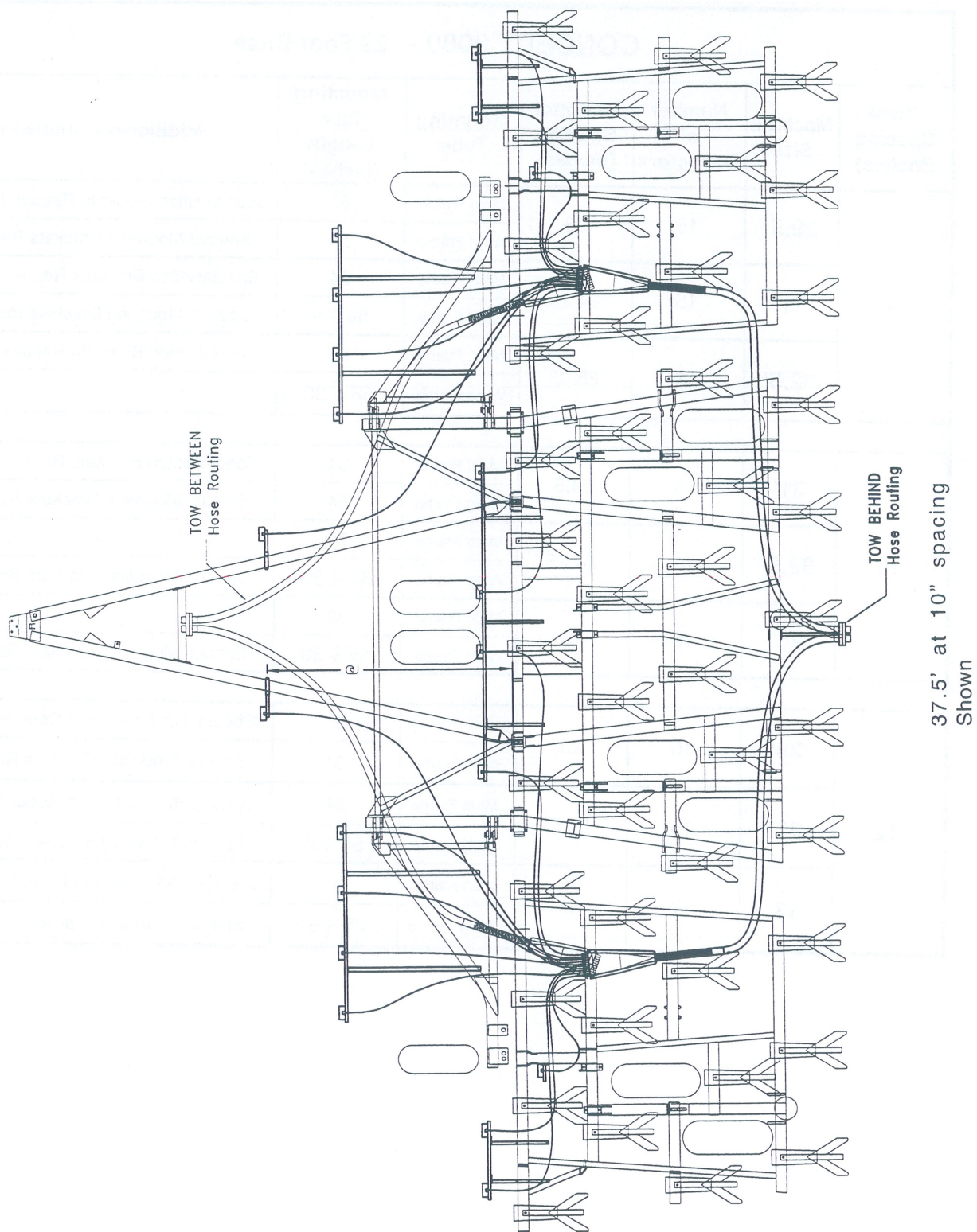
Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 29 Foot Base						
Shank Spacing (Inches)	Machine Size	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
9	29.5'	15	23	Main Frame	51	Special Hitch Brackets Required @66.5"
				Wing Frame	51	Special Mounting Brackets Required
	31'	15	24.25	Main Frame	54	Special Hitch Brackets Required @58"
				Wing Frame	54 & 9	Special Mounting Brackets Required
	32.5'	15	25.25	Main Frame	56	Special Hitch Brackets Required @51"
				Wing Frame	56 & 30	-
10	31'	15	24.5	Main Frame	54	Special Hitch Brackets Required @56"
				Wing Frame	54	Special Mounting Brackets Required
	32.5'	16	24.25	Main Frame	78	-
				Wing Frame	54 & 30	Special Mounting Brackets Required
	34'	16	25	Main Frame	80	-
				Wing Frame	55 & 30	Special Mounting Brackets Required
12	29'	15	23	Main Frame	51	Special Hitch Brackets Required @67"
				Wing Frame	51	Special Mounting Brackets Required
	31'	15	24.5	Main Frame	54	Special Hitch Brackets Required @56"
				Wing Frame	54 & 9	Special Mounting Brackets Required
	33'	17	23	Main Frame	51	Special Hitch Brackets Required @66.5"
				Wing Frame	28 & 51	Special Mounting Brackets Required

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 32 Foot Base



Note: See page 64 for assembly details.

Hose Routing

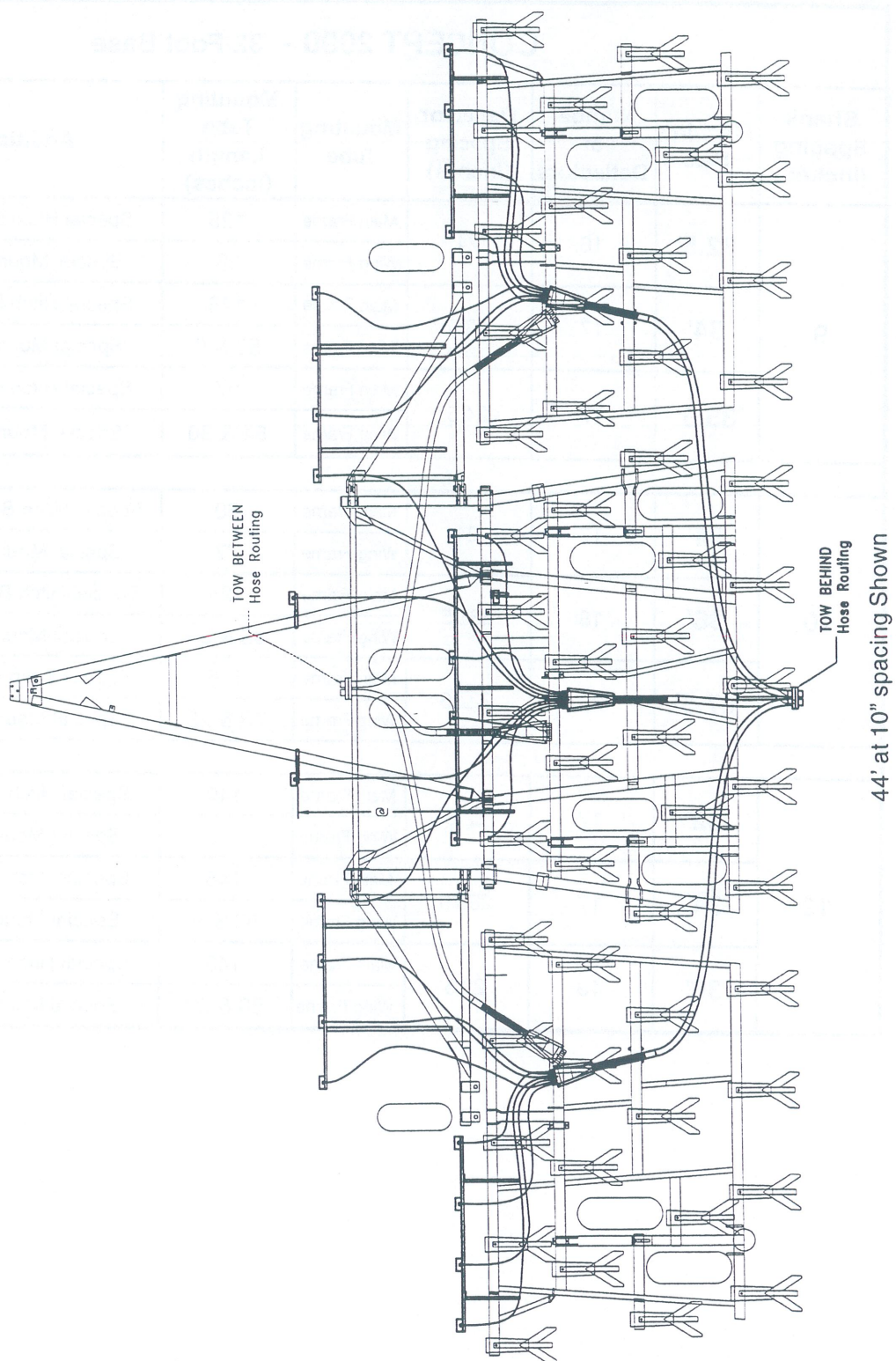
Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 32 Foot Base						
Shank Spacing (Inches)	Machine Size	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
9	32.5'	16	24	Main Frame	125	Special Hitch Brackets Required @81"
				Wing Frame	53	Special Mounting Brackets Required
	34'	17	23.5	Main Frame	146	Special Hitch Brackets Required @31"
				Wing Frame	52 & 9	Special Mounting Brackets Required
	35.5'	17	24.5	Main Frame	57	Special Hitch Brackets Required @21"
				Wing Frame	54 & 30	Special Mounting Brackets Required
10	34'	17	24	Main Frame	60	Special Hitch Brackets Required @25.5"
				Wing Frame	77	Special Mounting Brackets Required
	36'	18	23.75	Main Frame	124	Special Hitch Brackets Required @82.5"
				Wing Frame	53 & 29	Special Mounting Brackets Required
	37.5'	20	22.25	Main Frame	116	Special Hitch Brackets Required @92"
				Wing Frame	72 & 28	Special Mounting Brackets Required
12	32'	17	22.5	Main Frame	140	Special Hitch Brackets Required @40"
				Wing Frame	50	Special Mounting Brackets Required
	34'	17	23.75	Main Frame	148	Special Hitch Brackets Required @28"
				Wing Frame	53 & 9	Special Mounting Brackets Required
	36'	19	22.5	Main Frame	140	Special Hitch Brackets Required @40"
				Wing Frame	50 & 28	Special Mounting Brackets Required

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 38 Foot Base



Note: See page 64 for assembly details.

Hose Routing

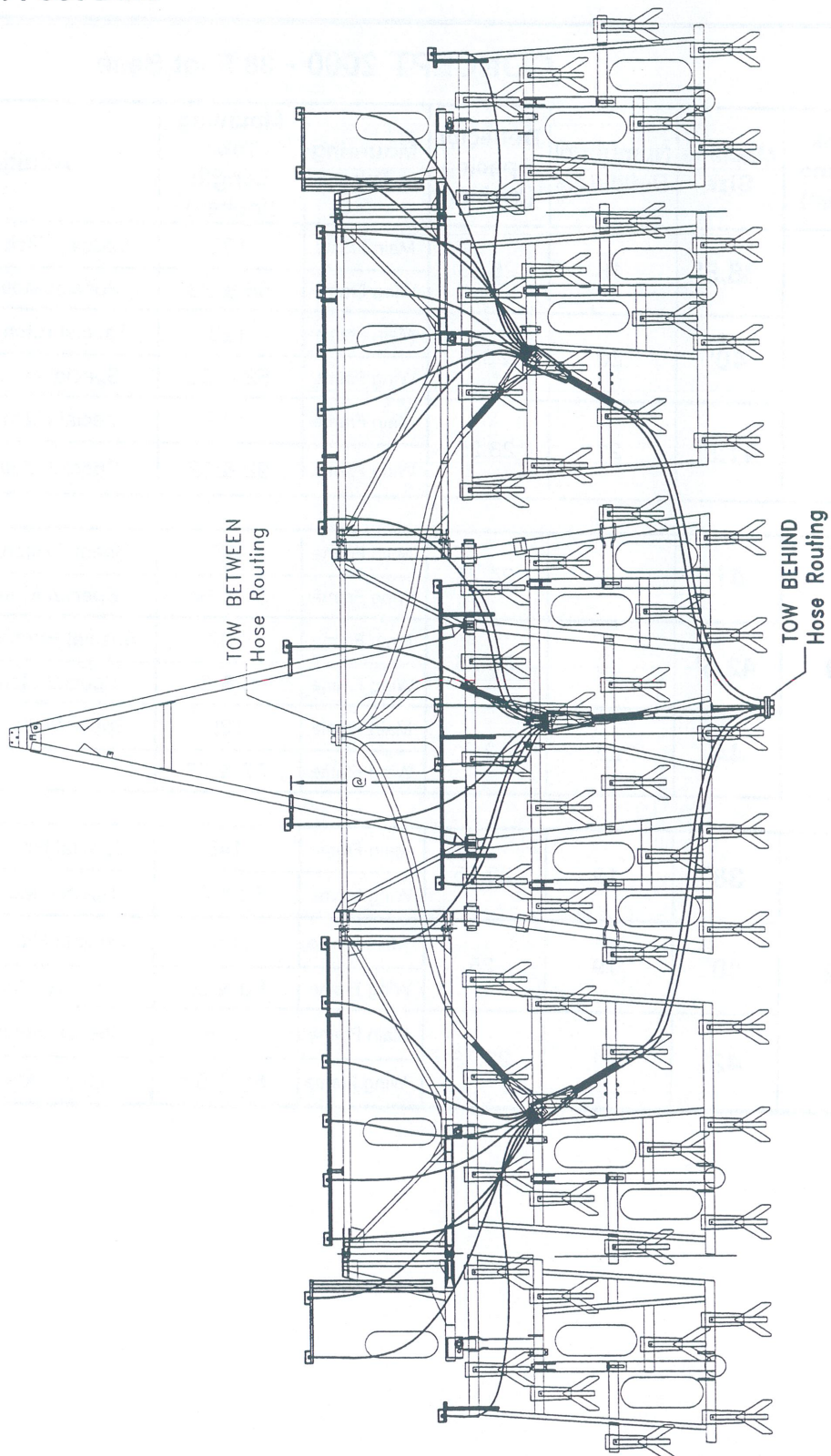
Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 38 Foot Base						
Shank Spacing (Inches)	Machine Size	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
9	38.5'	18	25.25	Main Frame	132	Special Hitch Brackets Required @72"
				Wing Frame	56 & 33	Special Mounting Brackets Required
	40'	20	23.5	Main Frame	123	Special Hitch Brackets Required @78"
				Wing Frame	52 & 52	Special Mounting Brackets Required
	41.5'	21	23.25	Main Frame	145	Special Hitch Brackets Required @27"
				Wing Frame	52 & 52	Special Mounting Brackets Required
10	41'	20	24.25	Main Frame	127	Special Hitch Brackets Required @73"
				Wing Frame	54 & 54	Special Mounting Brackets Required
	42.5'	20	25.25	Main Frame	132	Special Hitch Brackets Required @66.5"
				Wing Frame	56 & 56	Special Mounting Brackets Required
	44'	22	24	Main Frame	125	Special Hitch Brackets Required @75"
				Wing Frame	77 & 77	-
12	38'	19	23.75	Main Frame	148	Special Hitch Brackets Required @28"
				Wing Frame	53 & 30	Special Mounting Brackets Required
	40'	19	25	Main Frame	55	Special Hitch Brackets Required @11"
				Wing Frame	80 & 30	Special Mounting Brackets Required
	42'	21	23.75	Main Frame	148	Special Hitch Brackets Required @23"
				Wing Frame	53 & 53	Special Mounting Brackets Required

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 44 Foot Base



49' at 10" spacing Shown

Note: See page 64 for assembly details.

Hose Routing

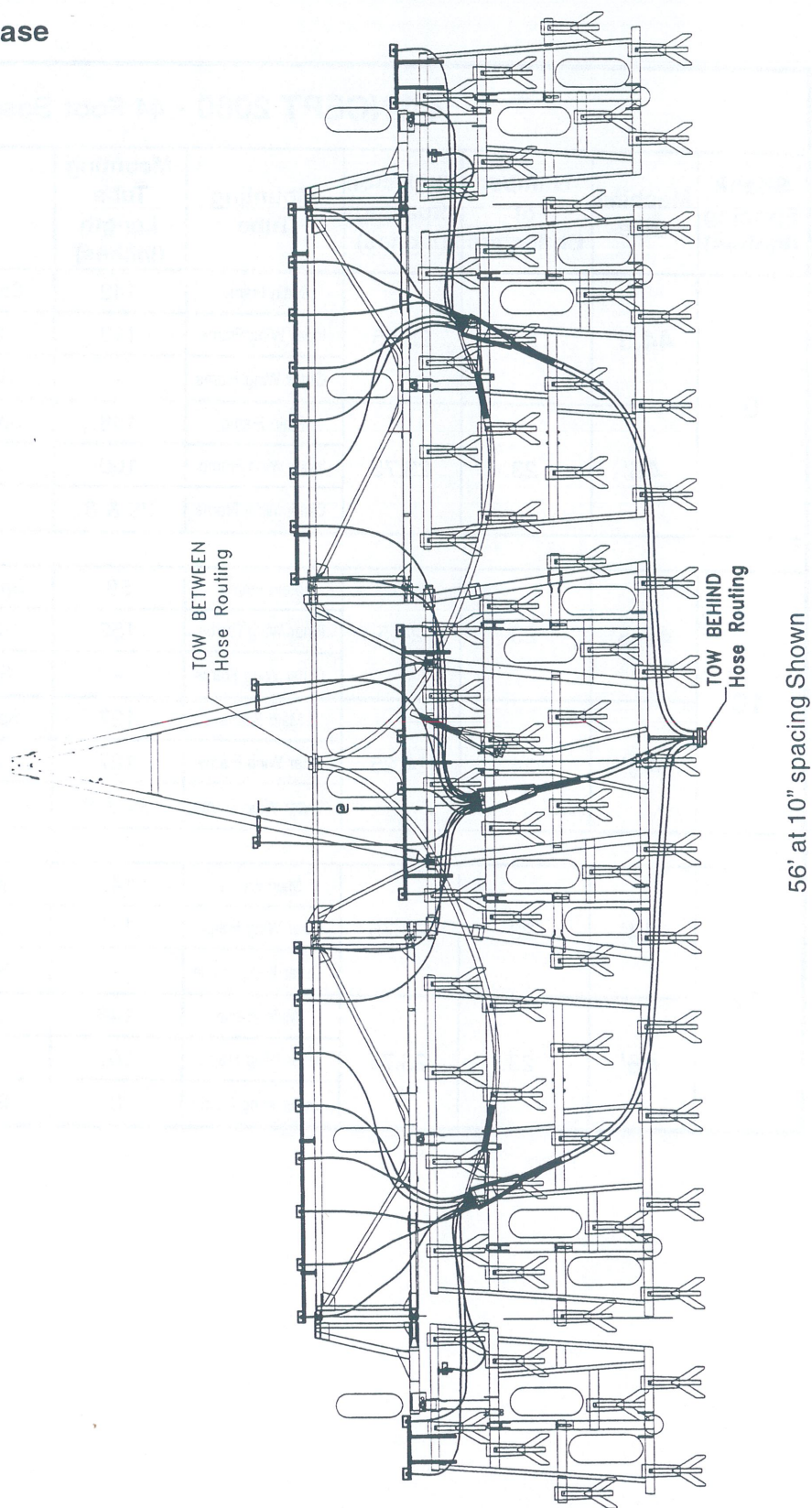
Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 44 Foot Base						
Shank Spacing (Inches)	Machine Size	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
9	44.5'	23	22.75	Main Frame	142	Special Hitch Brackets Required @32"
				Inner Wing Frame	119	2 Special Mounting Brackets used
				Outer Wing Frame	-	Special Mounting Brackets Required
	46'	23	23.75	Main Frame	148	Special Hitch Brackets Required @22"
				Inner Wing Frame	100	2 Special Mounting Brackets used
				Outer Wing Frame	29 & 8	-
10	47.5'	23	24.5	Main Frame	59	Special Hitch Brackets Required @1.5"
				Inner Wing Frame	152	2 Special Mounting Brackets used
				Outer Wing Frame	-	Special Mounting Brackets Required
	49'	24	24.25	Main Frame	127	Special Hitch Brackets Required @73"
				Inner Wing Frame	127	2 Special Mounting Brackets used
				Outer Wing Frame	34 & 8	-
12	44'	23	22.75	Main Frame	142	Special Hitch Brackets Required @32"
				Inner Wing Frame	119	2 Special Mounting Brackets used
				Outer Wing Frame	-	Special Mounting Brackets Required
	46'	23	23.75	Main Frame	148	Special Hitch Brackets Required @22"
				Inner Wing Frame	100	2 Special Mounting Brackets used
				Outer Wing Frame	8	Special Mounting Brackets Required

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 50 Foot Base



Note: See page 64 for assembly details.

Hose Routing

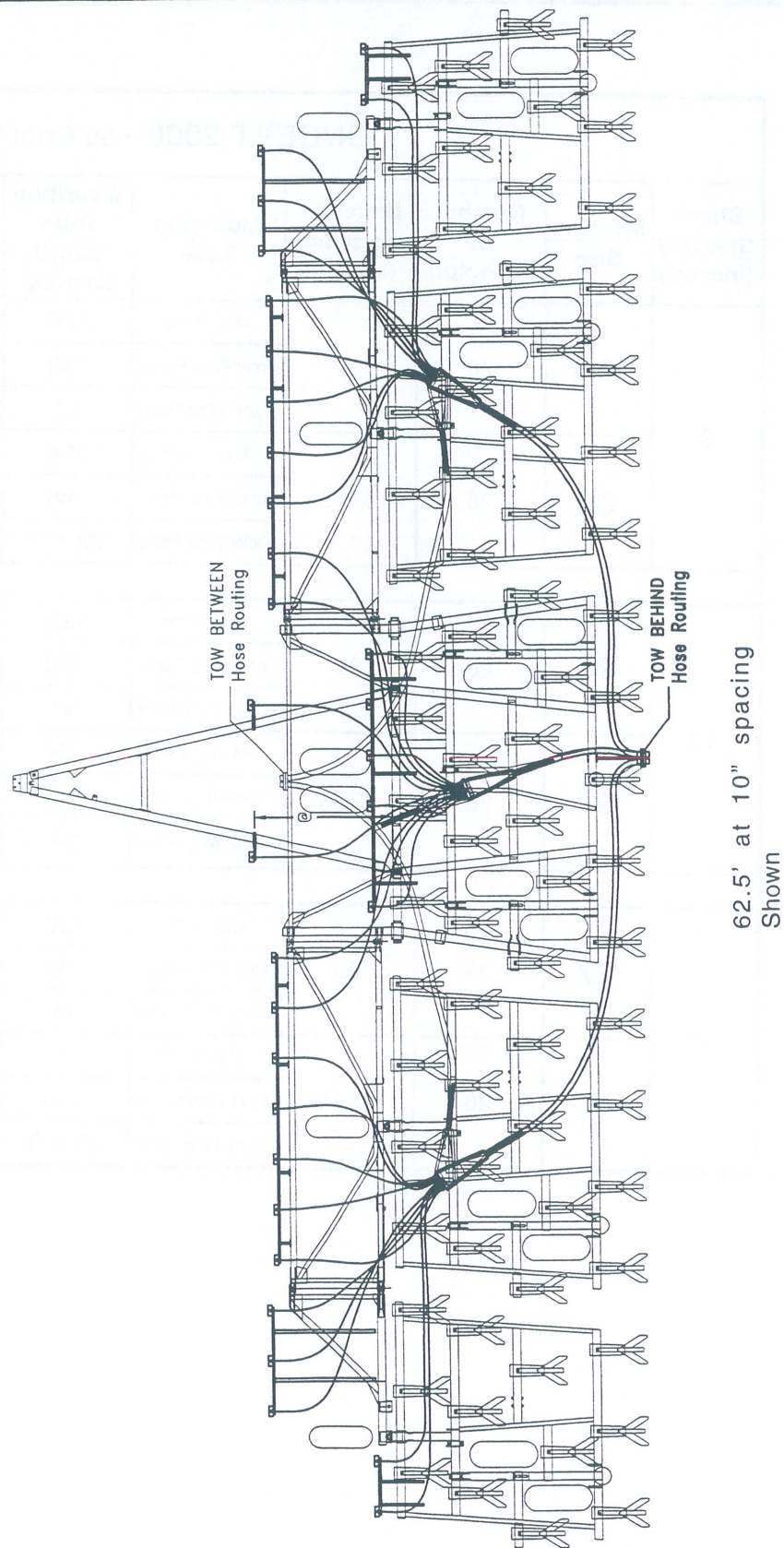
Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 50 Foot Base						
Shank Spacing (Inches)	Machine Size	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
9	50.5'	26	23	Main Frame	120	Special Hitch Brackets Required @81.5"
				Inner Wing Frame	143	3 Special Mounting Brackets used
				Outer Wing Frame	14	Special Mounting Brackets Required
	52'	26	23.75	Main Frame	124	Special Hitch Brackets Required @75.5"
				Inner Wing Frame	148	3 Special Mounting Brackets used
				Outer Wing Frame	29 & 9	-
10	54'	28	23	Main Frame	120	Special Hitch Brackets Required @81.5"
				Inner Wing Frame	166	3 Special Mounting Brackets used
				Outer Wing Frame	30	-
	56'	28	23.75	- Main Frame	124	Special Hitch Brackets Required @76.5"
				Inner Wing Frame	172	3 Special Mounting Brackets used
				Outer Wing Frame	29	Special Mounting Brackets Required
12	50'	26	23	Main Frame	120	Special Hitch Brackets Required @81.5"
				Inner Wing Frame	143	3 Special Mounting Brackets used
				Outer Wing Frame	14	Special Mounting Brackets Required
	52'	26	23.75	Main Frame	124	Special Hitch Brackets Required @75.5"
				Inner Wing Frame	148	3 Special Mounting Brackets used
				Outer Wing Frame	29 & 9	-

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

CONCEPT 2000 - 56 Foot Base



Note: See page 64 for assembly details.

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

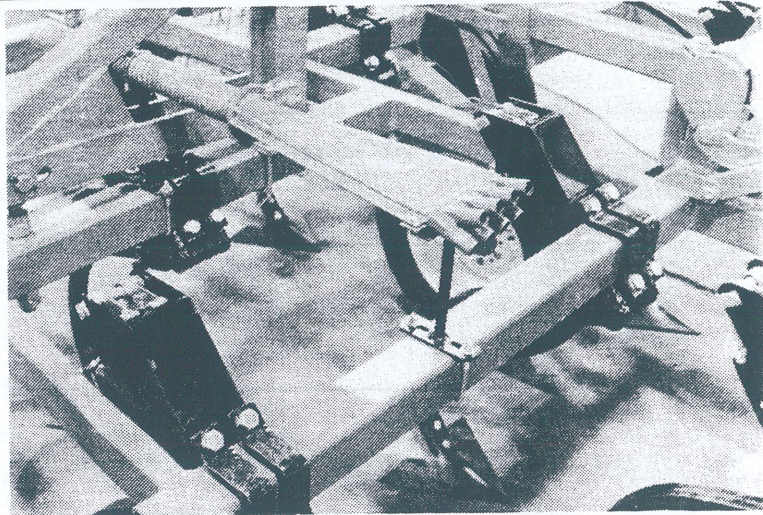
CONCEPT 2000 - 56 Foot Base						
Shank Spacing (Inches)	Machine Size	Number of Deflectors	Deflector Spacing (Inches)	Mounting Tube	Mounting Tube Length (Inches)	Additional Comments
9	56.5'	28	24	Main Frame	125	Special Hitch Brackets Required @ 75"
				Inner Wing Frame	149	3 Special Mounting Brackets used
				Outer Wing Frame	29	Special Mounting Brackets Required
	58'	28	24.5	Main Frame	128	Special Hitch Brackets Required @ 77"
				Inner Wing Frame	152	3 Special Mounting Brackets used
				Outer Wing Frame	30 & 10	Special Mounting Brackets Required
	59.5'	28	24.25	Main Frame	132	Special Hitch Brackets Required @ 66.5"
				Inner Wing Frame	132	3 Special Mounting Brackets used
				Outer Wing Frame	30 & 30	Special Mounting Brackets Required
10	61'	30	24.25	Main Frame	127	Special Hitch Brackets Required @ 73"
				Inner Wing Frame	151	3 Special Mounting Brackets used
				Outer Wing Frame	54	Special Mounting Brackets Required
	62.5'	30	24.75	Main Frame	129	Special Hitch Brackets Required @ 70"
				Inner Wing Frame	154	3 Special Mounting Brackets used
				Outer Wing Frame	55 & 30	-
	64'	30	25.5	Main Frame	133	Special Hitch Brackets Required @ 64.75"
				Inner Wing Frame	158	3 Special Mounting Brackets used
				Outer Wing Frame	56 & 31	-
12	56'	28	23.75	Main Frame	124	Special Hitch Brackets Required @ 76.5"
				Inner Wing Frame	148	3 Special Mounting Brackets used
				Outer Wing Frame	53 & 7	-
	58'	28	24.75	Main Frame	129	Special Hitch Brackets Required @ 69.5"
				Inner Wing Frame	154	3 Special Mounting Brackets used
				Outer Wing Frame	33 & 8	Special Mounting Brackets Required
	60'	28	25.5	Main Frame	133	Special Hitch Brackets Required @ 64.5"
				Inner Wing Frame	133	3 Special Mounting Brackets used
				Outer Wing Frame	56 & 31	-

Hose Routing

Concept 2000 Tillage Deflector and Secondary Head Locations

Tow Behind Three Frames

Trim 4" off stands. Mount Divider Head on wing frame through wing lift truss as shown.



Wing Hitch Truss

Mount brackets to hitch truss with clamp strap on top of bracket for added rigidity.

